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ABSTRACT

This document explores the various aspects of the 45-15 plan of school operation, whereby four groups of students are in school 45 days and then off 15 days on a rotating schedule throughout the year. The publication overviews the general aspects of 45-15, considering the basic concept and its origin, general implementation, how the plan compares with other year-round school calendars, and its efficiency and flexibility. The implications of 45-15 on curriculum, community, students, teachers, finance, and legislation are discussed. Student evaluation under the 45-15 plan is considered, and sample progress reports are included. The document outlines the 45-15 scheduling procedure and the multiple access scheduling; including discussions on establishing the course catalog, student and teacher assignments, calendar selection, the scheduling process, and student transportation. (Author/DN)

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NATIONAL
WORKSHOP ON "45-15"

August 10 & 11, 1972

Ramada Inn

South Burlington, Vermont

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INTRODUCTION

We are very pleased to have you participate in this "National Workshop on 45-15."

It is important to note that 45-15 is a concept, not a specific method of operation. Each school district involved in developing or implementing 45-15 has done so in its own unique way, based on its particular needs, strengths, and areas of weakness.

While the original concept of 45-15 was concerned only with space savings and economy, it is now viewed primarily as the most desirable "next step" in the program evolution toward an open-access curriculum. Indeed, at Champlain Valley Union High School, the most accurate term for the concept is "The Multiple-Access Curriculum and Calendar."

It is our purpose to explore with you all aspects of the 45-15 concept at this Workshop -- structure, curriculum, students, faculty, community, finances, transportation, scheduling, and the like. We hope it will be a worthwhile experience and look forward to continuing the professional relationships established here.

Johannes I. Olsen
Lucien E. Lambert
Paul D. Rice

"45-15" Associates

Caution: This portfolio is not intended to be a complete document in the sense of providing explanations for each item. First, it highlights items for your recall later; second, the portfolio should be used as a notebook in which you can write your own comments alongside the items written or illustrated.

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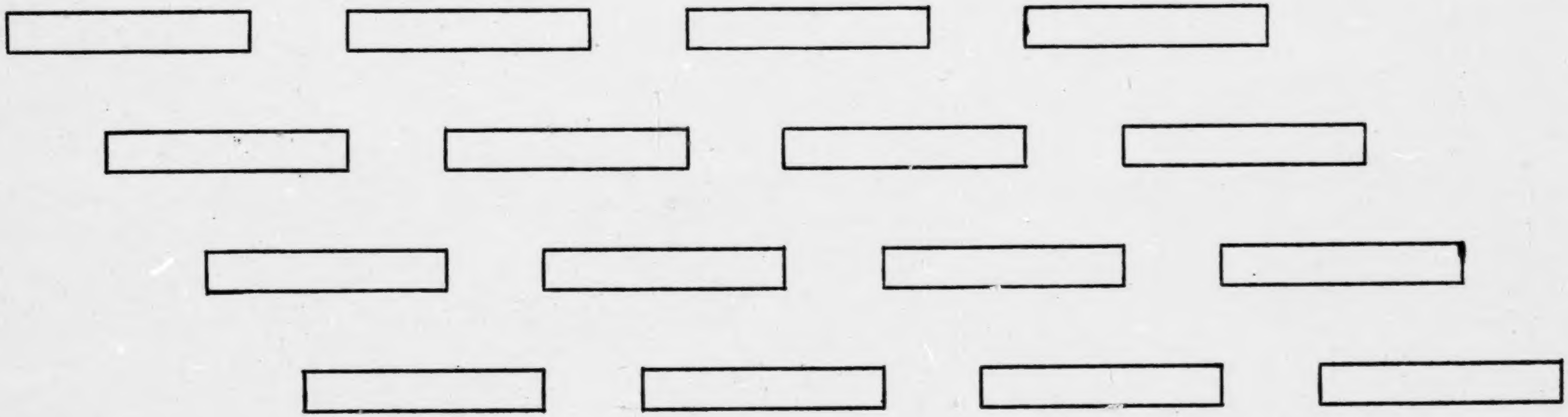
PART I

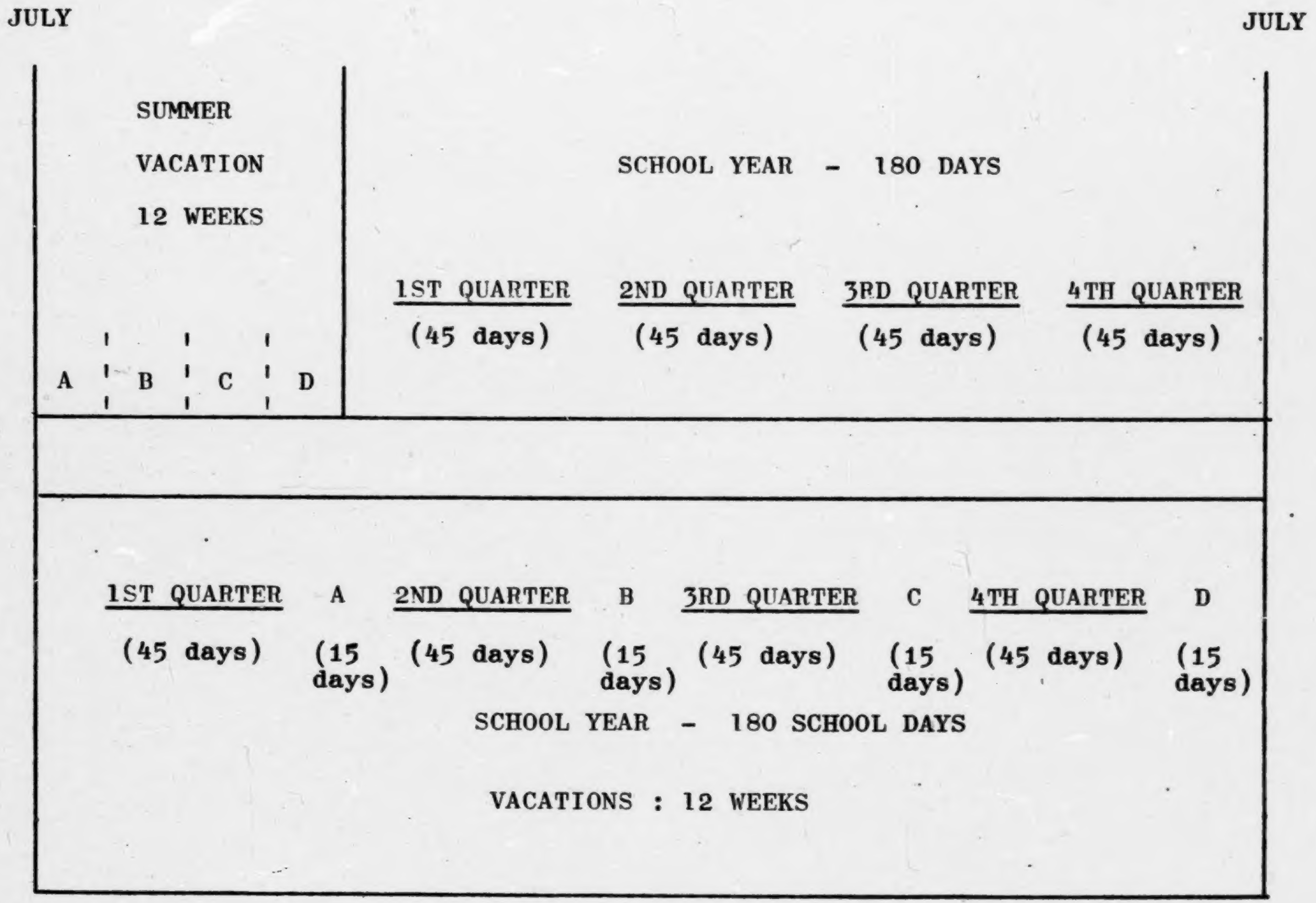
OVERVIEW

WHAT IS 45-15? BASIC CONCEPT



The 45-15 cycle can be expanded as shown on this page--

4 cycles staggered to begin at intervals of 15 school days--


JULY
JULY
SUMMER
VACATION
12 WEEKS
A
B
C
D
SCHOOL YEAR - 180 DAYS
1ST QUARTER
(45 days)
2ND QUARTER
(45 days)
3RD QUARTER
(45 days)
4TH QUARTER
(45 days)
1ST QUARTER
(45 days)
A
(15 days)
2ND QUARTER
(45 days)
B
(15 days)
3RD QUARTER
(45 days)
C
(15 days)
4TH QUARTER
(45 days)
D
(15 days)
SCHOOL YEAR - 180 SCHOOL DAYS
VACATIONS : 12 WEEKS

GENERAL IMPLEMENTATION TO DATE:

...each of four cycles has 1/4 of students

...student assignments to cycles (or groups) are made administratively

...student assignments to cycles are mandatory and, depending on criteria for assignments, rigid
(Note: students' assignments need not be mandatory!)

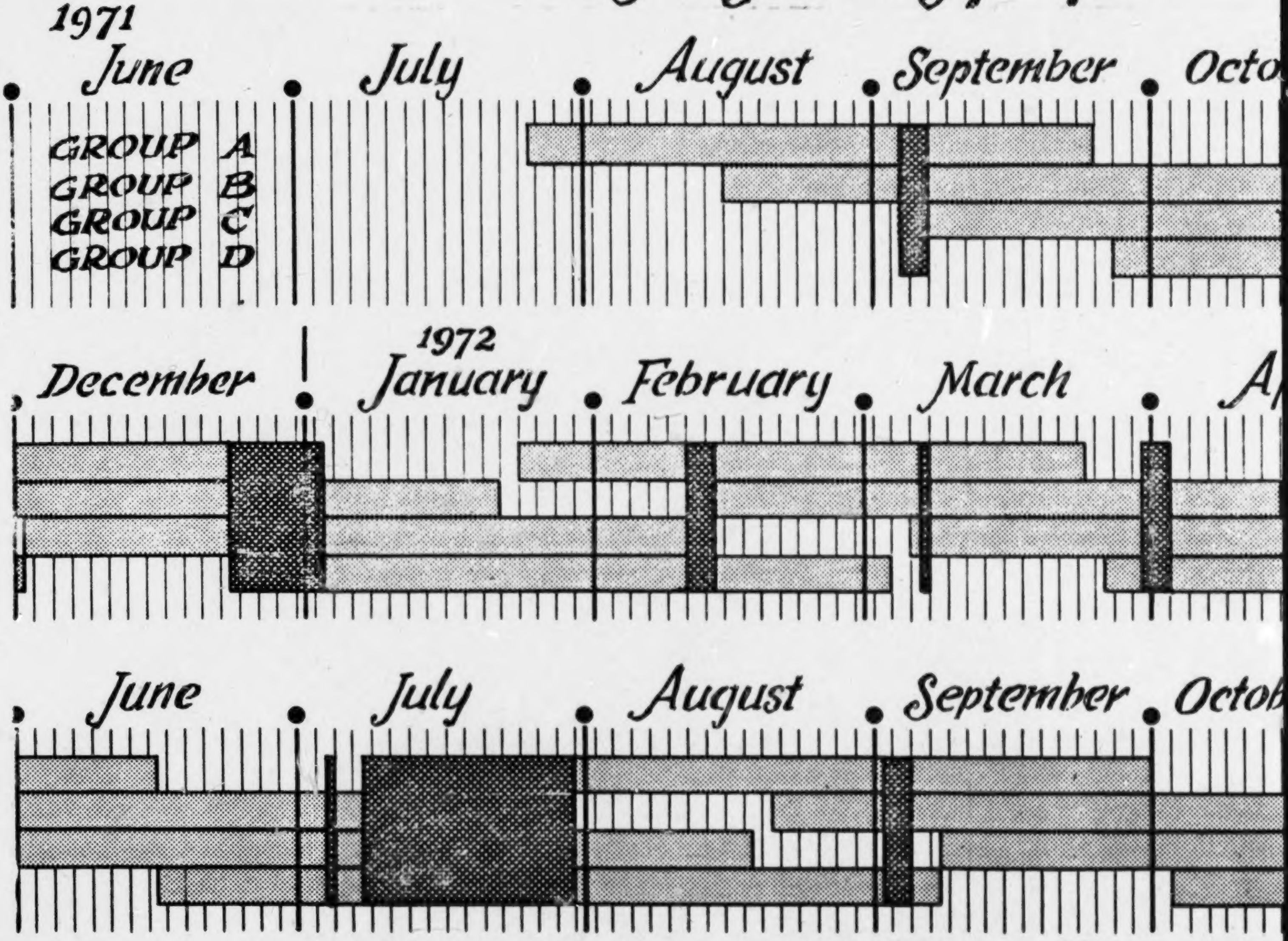
SUCH IMPLEMENTATION ACHIEVES:

...space savings -- only 3/4 of students in school at any one time

...lower budget than would otherwise be needed -- in terms of construction costs, equipment, per unit employee costs, etc.

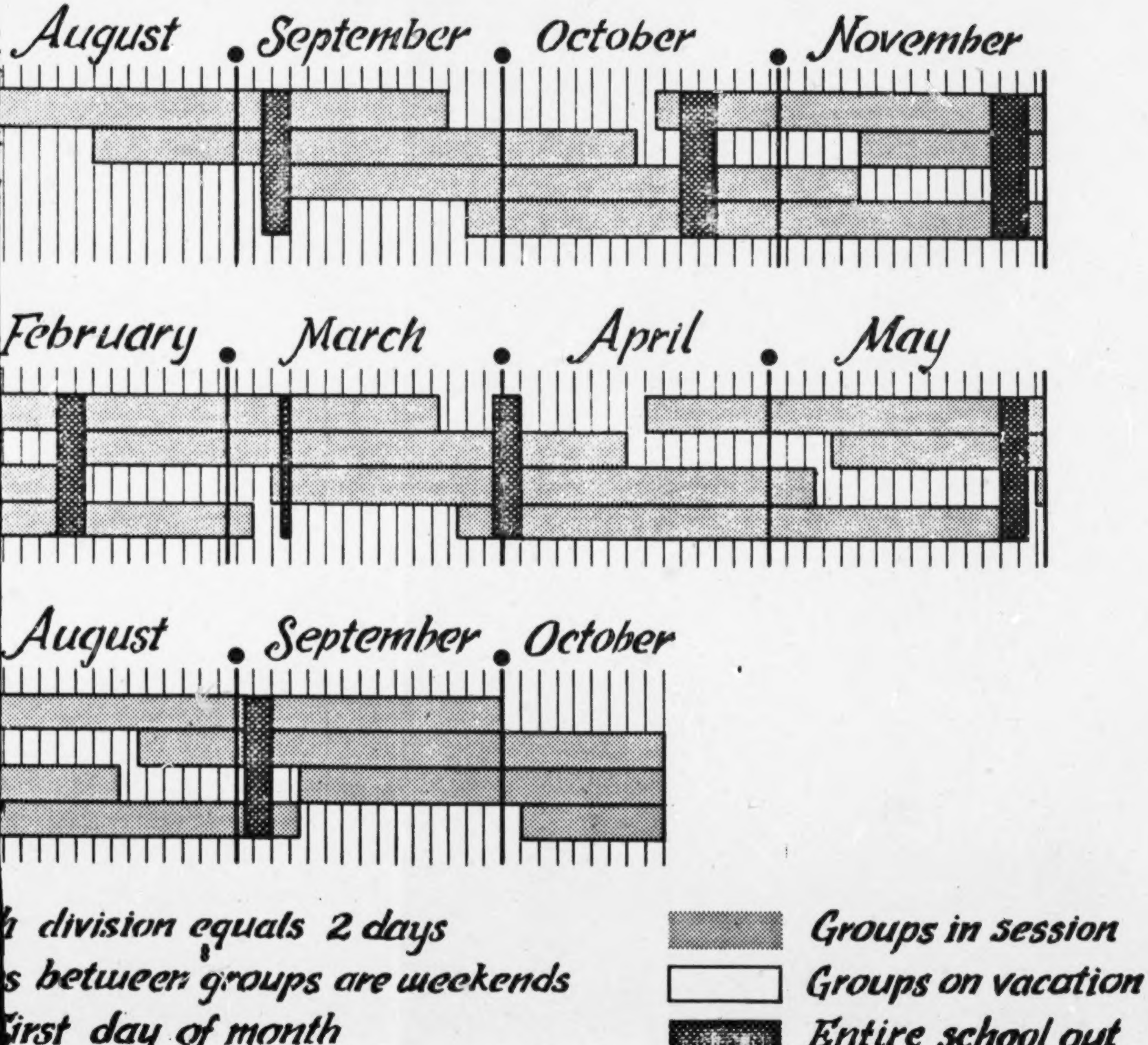
...retaining greatest number of options for future facilities expansion

45-15 in 1971-72



Legend: Each division equals 2 days
Gaps between groups are weekends
● First day of month

5-15 in 1971-72



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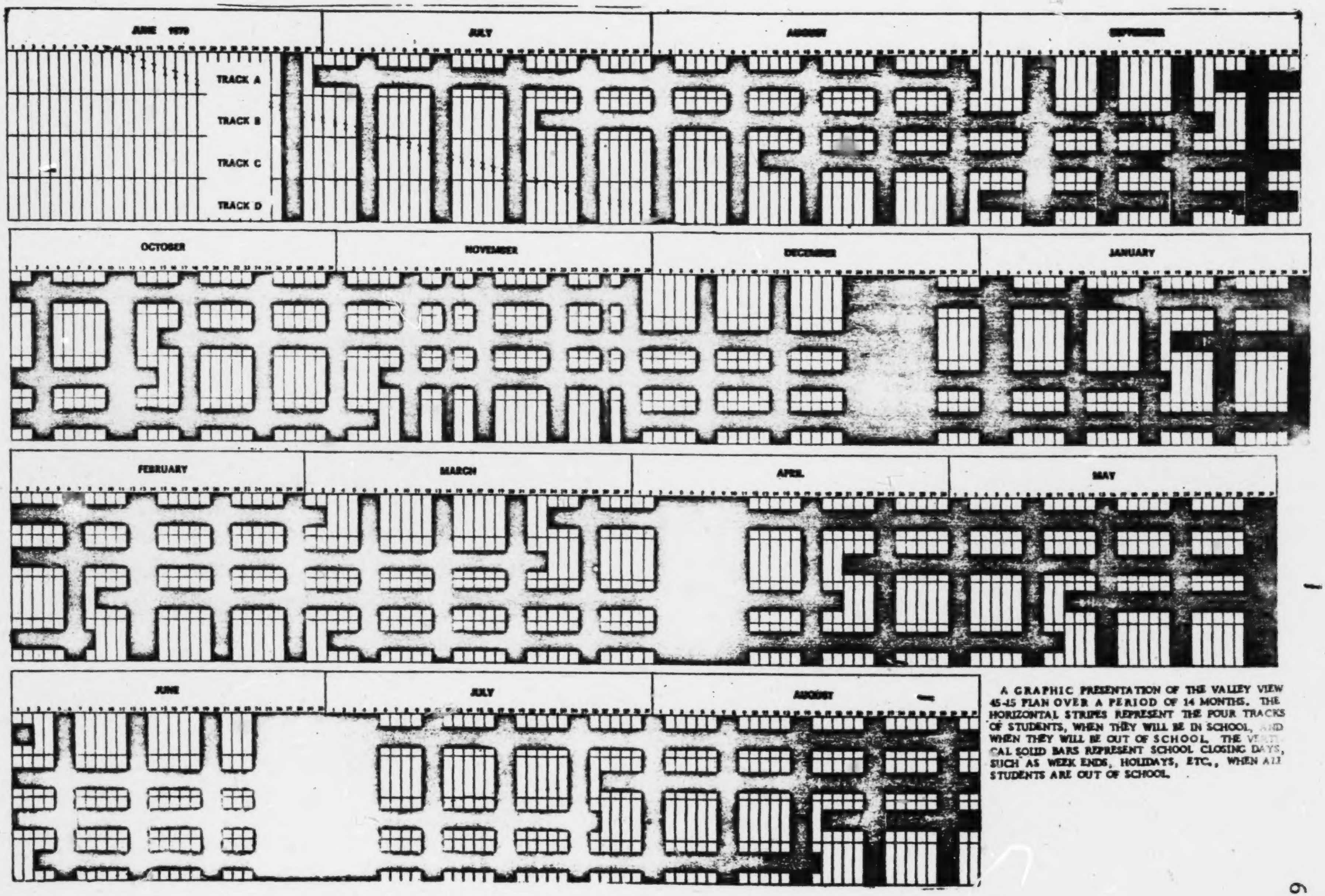
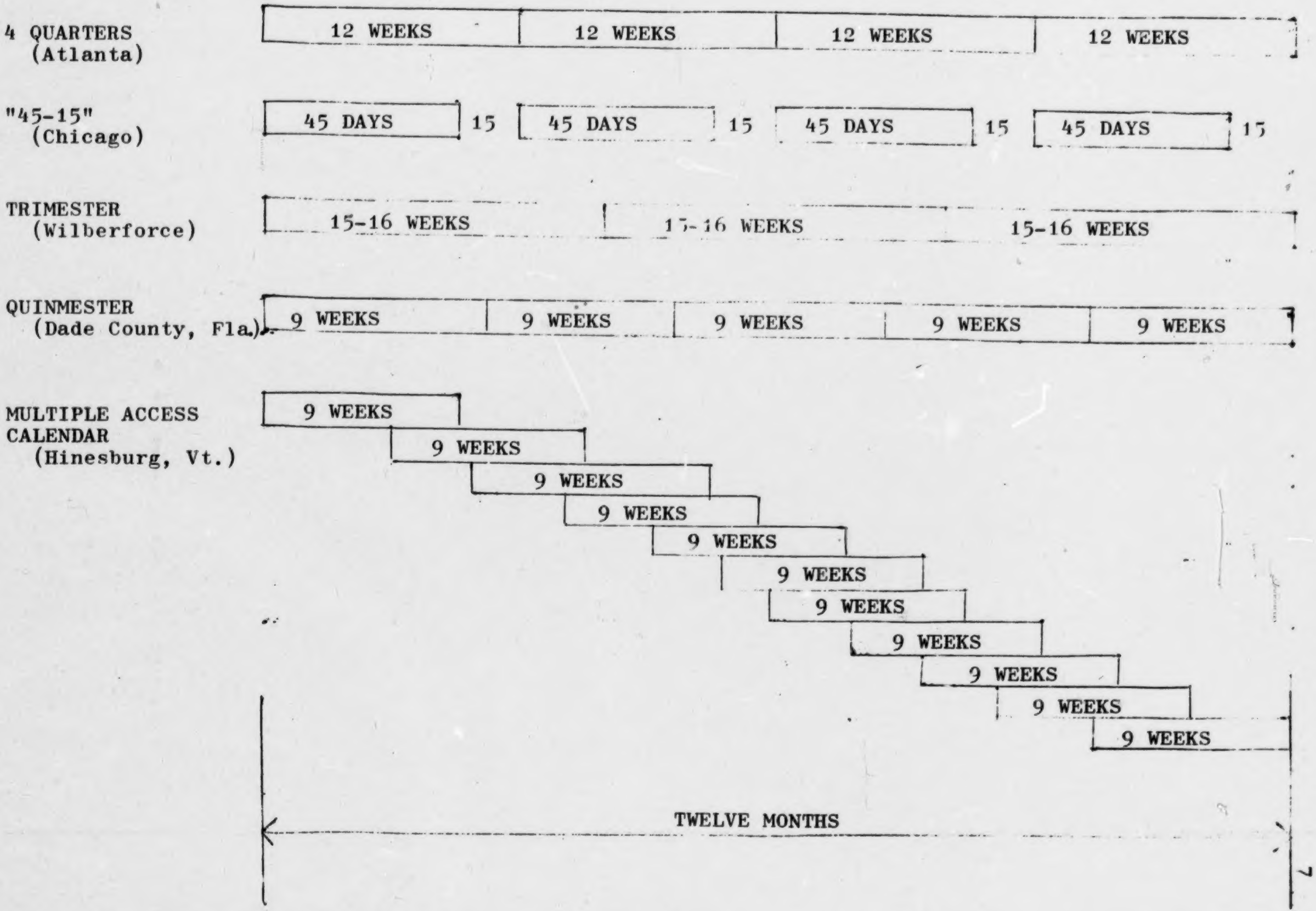
COMPARISON WITH OTHER YEAR-ROUND SCHOOL CALENDARS



A GRAPHIC PRESENTATION OF THE VALLEY VIEW 45-15 PLAN OVER A PERIOD OF 14 MONTHS. THE HORIZONTAL STRIPES REPRESENT THE FOUR TRACKS OF STUDENTS, WHEN THEY WILL BE IN SCHOOL, AND WHEN THEY WILL BE OUT OF SCHOOL. THE VERTICAL SOLID BARS REPRESENT SCHOOL CLOSING DAYS, SUCH AS WEEK ENDS, HOLIDAYS, ETC., WHEN ALL STUDENTS ARE OUT OF SCHOOL.

FIGURE 4 DIFFERENT SCHOOL CALENDARS



ORIGIN OF 45-15

As far as we can determine, 45-15 was first used in Aliquippa, Pennsylvania, from 1929 to 1938. Its objective was to provide additional classroom space without further construction. The objective was achieved and sufficient documentation exists to show that savings also resulted. George Jensen reported at the Third National Seminar on Year-Round Education (1971) on other aspects of the Aliquippa operation:

1. Fewer teachers were required and employing staff for year-round operations was no problem.
2. Academic achievement did not suffer during the summer months (even before air conditioning!).
3. There were no physical or mental health hazards involved for either teacher or student.
4. Average daily attendance for the summer quarter was higher than any other period.
5. In spite of the mandatory quarter system on which Aliquippa operated, far fewer students and their families were frustrated in vacation planning than had been expected.

The program at Aliquippa was duplicated at the same time in the neighboring community of Ambridge and its results were much the same. It is important to remember that both of these programs were mandatory, sequential attendance 4-quarter patterns in which 75% of the student body is always in attendance while the other 25% is always out of school. (We underscore mandatory and sequential for reasons that will become obvious when we discuss pupil schedule requests and pupil course requests.)

45-15 EFFICIENCY

All things being equal or static, the theoretical implications of 45-15 dictate:

1. Faculty utilization can be increased by 33%.
2. Facility utilization can be increased by 33%
3. Equipment utilization can be increased by 33%

if a school has effectively reduced its on-site student population by 25%.

The 45-15 calendar is an attempt to manipulate space over 240 days instead of 180. In its narrowest sense, 45-15 dictates to a student that he will begin school July 26, if he is in A Group, and that his school year will terminate June 15. It tells him when he shall take his vacations and with whom he shall go to school. Implicit in the calendar, also, is a fiat to the teacher that he will continue a reporting system based on the traditional four-quarter module common to many schools and that, furthermore, he need not change his methods of teaching at all. It may mean the abolition of singleton courses because enrollment spread over the four houses might prove to be too expensive on a per capita basis. (If 45-15 fails for a given school system, it is also possible to return to a traditional model by the following September, although D house might suffer some inconvenience by having to reenter into the traditional calendar immediately.)

9a

FACTORS TO CONSIDER

CURRICULUM

One of the basic decisions that must be made is curriculum availability to students. We feel very strongly that the total curricular offerings must be available to all students, regardless of the group to which they are assigned or choose to attend. To see how this is done, refer to the sections on curriculum and scheduling in Part II.

COMMUNITY

A. The Community Must Understand:

1. School philosophy and goals
2. Present curriculum and techniques
3. Present building situation
4. Present financial situation
5. Projections for program
6. Ability of staff
7. Projections for building
8. Projections regarding finances
9. The boundaries of "45-15"

B. Community: Opportunities and Concerns.

1. Break with tradition
2. Families
3. Student jobs
4. Is the school babysitting for parents?
5. Curriculum
6. Students out of school year round
7. Students need a 12-week vacation in the summertime (?)
8. Summer camps
9. Churches
10. Social implications for urban district
11. Social implications for rural district
12. Initial concerns, with understanding of calendar and program, become opportunities

"Furthermore, some of the proposals for a year-round school may become very beneficial to the life style of millions of Americans who flock to the highways and vacation spots in summer months. As the population continues to expand, the nation may need a new school pattern to encourage even more staggered vacation periods for families who seek to enjoy parks, lakes and recreation lands. Political leaders and population ecologists might find that their support of an all-year school would offer significant values to a richer life for all, far exceeding the educational goals involved." [1]

---

[1] Dr. Wendell H. Pierce, (Executive Director, Education Commission of the States, Denver, Colorado), "Politics And Year-Round Education," From the Proceedings of the 3rd National Seminar on Year-Round Education, Cocoa Beach, Florida, (March 24-26, 1971), p. 21b.

STUDENTS

A. Activities

It is expected that all extra-curricular activities will continue as at present. Most activities for which teachers are paid will not require increased costs because of their seasonal nature. Exceptions would be golf, intramurals, bookstore, publications and similar activities. Anticipated additional costs for faculty is about $3000 for 1000 students.

The three-week vacation units would lend themselves to many kinds of student activities. The school should be ready to respond to student needs and requests for activity programs during these times, but not to initiate such programs except as a response. We feel the school should not impose itself on students' vacation times.

The school activity program and that of local recreation programs should be closely coordinated; the coordination and planning of community-school activities could be beneficial to all involved, especially in avoiding duplication of facilities and programs.

The question has been asked as to whether students would be willing to participate in scheduled activities during their three-week vacation units. Precedent says yes.

Students now come to the school when no transportation is offered - to participate in the summer before school opens, on holidays and weekends, and during the winter and spring recesses. As always, the decision is a personal one, made by each individual. The fact that transportation will be provided when school is in session, even if the person is on a three-week vacation, should encourage greater participation.

B. Flexibility of Program for Students

Individuals and family circumstances may make it desirable to enable students to have the opportunity for more-than-three-week experiences at any time of the year for jobs, travel, D.U.O., work-experience programs, vacations, and the like. This can be accomplished, with certain limitations, without losing step academically (as shown under "Curriculum").

C. Jobs

Student job opportunities will be enhanced, especially in light of the decreasing summer job market for high school students. Again, if summer jobs are a student's main concern, he can elect a calendar to allow him his summer off.

The variation of calendars also makes available opportunities for students to work in seasonal jobs never before open to them at times when students from other schools are not available. In our area jobs at Thanksgiving, Christmas, Easter, apple-picking time, ski season, and the like are usually available, but no students are available because school is in session.

Employers have shown interest in the training programs on a 15-day cyclical basis so that students would replace each other during their cyclical vacations. In other words, it is possible for four students to hold down one full-time job all year round.

A school could also set up a student employment agency and place students during their vacations, if they so wished, for all or any part of the vacation, depending upon the availability of jobs and students.

TEACHERS

A. Teacher Salaries

RECOMMENDATION:

OFFER A PER DIEM SALARY SCHEDULE

OR

PAY ON BASIS OF EFFECTIVENESS

OR

FORGET "45-15"

The matter unresolved could help defeat the concept of "45-15", educational benefits notwithstanding.

ARTICLE XXIII
SALARY SCHEDULE
1972-73

Teacher salaries will be based on a per diem rate.

For the purpose of determining a per diem rate for teachers, a full calendar year will assume 260 potential work days. Twenty-nine of the 260 potential work days will be assumed to be paid vacation days and paid holidays. The total work days available in a full year contract is 231 days.

EXAMPLE

	1971-72 Calendar	1971-72 Calendar Dept. Heads	Full Year
Work days available	185	190	231
Paid vacations and holidays	23	24	29
Total potential days equals per diem multiplier	208	214	260

OR

the multiplier (potential days) for per diem purposes is derived as follows:

$$\frac{185}{208} = \frac{190}{214} = \frac{231}{260} = \frac{\text{work days}}{\text{potential days}}$$

Step	BA + 0	(+1.5%)	BA + 30	(+1.5%)	MA + 0	(+1.5%)
1	32.45	32.94	36.35	36.90	36.35	36.90
2	34.40	34.92	38.29	38.86	38.29	38.86
3	36.35	36.90	40.24	40.84	40.24	40.84
4	38.62	39.20	42.51	43.15	42.51	43.15
5	40.89	41.50	44.78	45.45	44.78	45.45
6	43.16	43.81	47.05	47.76	47.05	47.76
7	45.43	46.11	49.43	50.07	49.43	50.07
8	47.70	48.42	51.60	52.37	51.60	52.37
9	49.98	50.73	53.87	54.68	53.87	54.68
		(+3.0%)				
10	52.25	53.82	56.14	56.98	56.14	56.98
11	53.55	55.16	57.44	58.30	57.44	58.30
				(+3.0%)		
12	54.84	56.49	58.74	60.50	58.74	59.62
13	56.14	57.82	60.04	61.84	60.04	60.94
						(+3.0%)
14	57.44	59.16	61.33	63.17	61.33	63.17
15					61.98	63.84
16					62.63	64.51

A Basic Contract shall be considered to be 208 potential days (185 work days available).

Service by a teacher in excess of 208 potential days shall be voluntary.

All teachers shall advance one step on the salary schedule unless held on step for just cause until frozen on step of the appropriate column. Advancement to the next step is understood to be based on favorable evaluation of teaching performance.

Each teacher eligible to move a step shall receive an additional 1.5%. Teachers frozen at or above steps 9, 11, and 13 in the appropriate columns shall receive an additional 3%.

Department Chairmen will be paid base salary plus credits plus 6 per cent with a department staff of four (4) persons including the chairman; base salary plus credits plus 10 per cent with a department staff of five (5) or more persons including the chairman.

A 5th-Year Certificate obtained under a formal program will be considered the same as a M.A. + 0.

Approved credits shall be paid for at the rate of $27 per credit (.4% of $6,750) beyond Bachelors' Degree to a maximum of Bachelors' + 40 and beyond Masters' Degree with no maximum.

B. Teacher Scheduling and Utilization

Base 6 daily -- all professional assignments

Base 8 annually -- all professional assignments

Professional assignments include classes; curriculum planning, research, and development; and other professional activities.

Non-professional assignments (cafeteria duty, etc.) should be assigned to non-professional personnel.

We believe that provisions should be made for individual addendums to the basic contract as agreed to by the teacher, department chairman, and principal. These addendums will provide time for study, additional vacation periods, travel, and the like; they may take effect at any agreed upon time of year. Approval of the addendums should be granted only after ascertaining that the instructional program will not suffer because of the teacher's absence.

Flexibility in teacher contract, an item that involves 60% to 80% of a school's budget assumes many proportions in the "45-15" concept, and in any other year-round experience as well. Undoubtedly, some teachers cannot or will not teach the year round. It is also very attractive to new and young teachers who see this as an opportunity to receive per diem increases which result in significant beginning salaries. A third realization in hiring practices is the possibility of developing community resources people for short term employment to fill vacancies created by temporary absences of personnel who are on vacation, sabbatical, etc.

C. The Question of Teacher Attrition.

Obviously, as you discuss the staff requirements under a continuous school year program such as "45-15", the question of attrition is of some magnitude. Assuming that natural attrition because of retirement or other causes and increased enrollment fill this void there is no dilemma. However, present indicators point out that a surplus of teachers is having the tendency to stabilize faculties and it is conceivable that an effective balance between enrollment and staff would not occur, in which case there is need for critical decision making. To follow the concept of natural attrition could theoretically inflate the budget by as much as 25%. This specter is very real for both faculty and decision makers. Nevertheless, we recommend that desired faculty attrition be achieved naturally, not forced. Excess faculty positions, if they do result, can be very effectively utilized for R & D and to improve program.

D. Teacher Concerns About "45-15".

1. No desire to work year round
2. Loss of continuity in classes
3. Stress-teaching for long period of time (emotional and psychological drain)
4. Teacher concern for effect on family life, student jobs
5. Not enough time for teachers to re-create themselves
6. Lack of understanding of the concept of "45-15", both economic and educational (for example, saving money, scheduling, grouping)
7. Unknown teacher vacation and salary policy
8. Need for more basic change in education than what is proposed under "45-15"
9. Possible loss of flexibility in course offerings

10. Summer months - learning in extreme heat
11. Athletics
12. It is a displacement model, not a co-action one
13. "45-15" appears to be a rigid scheduling system
14. Student vacations - long periods of time needed for doing nothing
15. Summer school for teachers interfered with
16. Not enough time in feasibility study- could prophesy failure of plan
17. Segmented education - the fact that the whole district would not be on the same plan
18. Not an authority model

E. Teacher Opportunities.

1. Fulltime professional employment, if desired
2. Flexibility in vacation and leave time
3. Involvement in multiple access curriculum
4. Intimacy and greater effectiveness of smaller faculty
5. Involvement in innovative education
6. Program opportunities during summer (waterfront programs, summer stock, science field trips,etc.

POSSIBLE LEGISLATIVE CONSIDERATIONS

1. ADM vs ADA
2. Carnegie unit restrictions
3. Authority to establish/change school calendar
4. Authority to require teachers to work more than 185 days
5. State department approval
6. Mandate to consider continuous school year
7. Authority to require student attendance during summer vs. traditional school year

FINANCIAL CONSIDERATIONS

A. Fewer for Longer = No Increased Cost

1. Teachers
2. Drivers
3. Busses
4. Classrooms and other facilities
5. Equipment

B. Per Unit Costs = Less Cost

1. Employee benefits

C. Maintenance = No Increased Cost

1. (see hospitals, office buildings, etc.)
2. Fewer students = fewer problems
3. Less facilities maintained for longer time

D. Climate Control = Increased Cost

1. Needed now for late spring and early fall

E. Comparative Budgets

(see following two pages)

CVUHS

COMPARATIVE BUDGETS

EXPENDITURE CATEGORIES	PROPOSED 45-15 (71-72)	PROPOSED TRADITIONAL (71-72)	ACTUAL TRADITIONAL (71-72)	PROPOSED MULTI ACCESS (72-73)
100 CSSD and Board	65,000	63,000	62,000	55,000
211-214 Teacher Salaries	866,000	878,000	899,000 (1)	801,000 (1)
215-300 S. Sec. & Clerical Salaries	28,000	28,000	32,000	35,000
216 Aide Salaries	35,000	30,000	43,000	56,000
220, 240, 250 Teaching Supplies, Texts, curric. materials, conferences	61,000	65,000	55,000	65,000
230 Library & A-V	29,000	28,000	23,000	24,000
400 Health	12,000	11,000	13,000	26,000 (2)
500 Transportation	82,000	89,000	93,000	96,000 (3)
600 Plant Operation	86,000	86,000	84,000	92,000
700 Plant Maintenance	25,000	25,000	39,000	31,000
800 Fixed Charges	73,000	77,000	68,000	89,000
900 Food Service & 1100 Community Services	-0-	-0-	-0-	-0-
1000 Student Body Act.	26,000	26,000	29,000	26,000
1200 Capital Outlay	37,000	50,000 (1)	67,000	16,000
1300 Debt Services	110,000	110,000	115,000	157,000
1400 To Other Districts	14,000	14,000	12,000	16,000
Total, rounded	1,549,000	1,580,000	1,634,000	1,585,000
Actual Total	1,551,517	1,581,444	1,635,754	1,588,444
Enrollment	960	960	960	990
No. of Faculty	65	65	65	63

(1) Teacher carry-over
(2) Home school coordinator added
(3) Special Ed, Vocational Ed & DUO busses added

CVUHS COMPARATIVE BUDGETS (continued)

Notes:

(1) When the district was formed, a salary budget "carry-over" system was established whereby the salary budget included 2/12ths (July and August) of the previous school year's contract commitments and 10/12ths (September thru June) of the year's contract commitments. The proposed and actual budgets for '71-72 represent the transition to eliminate splitting contract commitments. Beginning with the '72-73 budget, 12/12ths (100%) of the contract commitments are budgeted in the fiscal year for which the contracts are offered. (Categories include both annual increases in salary schedule and normal teacher increments.)

(2) Increase due to greater use of aides (resulting in more employed) than originally planned for '71-72.

(3) Combination of aides, new curriculum designs and materials (many teacher-developed), and the like, contributed to lower expenditures than anticipated.

(4) Increase due to addition of home-school coordinator and consulting psychiatrist.

(5) Increase due to increased services for Special Education and DUO.

(6) Increase due to rate increases for utilities and services, salary increases, and weekend supervision of building.

(7) Increase due to unanticipated roof repairs and replacement of offset machine.

(8) Lower expenditure due to decrease in teaching staff as differentiated staffing concept implemented.

(9) increased expenditure due to
  a) reimbursed purchases of equipment through title and other funds - reimbursement shown in income statement
  b) unanticipated site work
  c) unanticipated additional costs to meet inspection requirements of Fire Marshall's office (wire glass, detectors, emergency lighting, etc.)

(10) Debt service items transferred to category 1300.

(11) Increase due to transfer of debt service items from category 1200 and payment of land note.

(12) Represents expenditures to area technical centers for shared-time vocational students.

Addendum to pages 23 and 23a

Addition to Note (1):

To better understand (complicate?) the 211-214 salary figures, note the following differences in bases for teacher contracts:

Actual Traditional '70-71: Base 6 daily - 5 professional, 1 supervisory (study hall, cafeteria, etc.) assignments (see pages 18, 19).

Proposed 45-15 '71-72: Same, but Base 8 annually, with all teachers on full-year contracts.

Proposed Traditional '71-72: Same as Traditional '70-71.

Actual Traditional '71-72: Base 6 daily - all professional assignments.

Proposed Multiple Access '72-73: Base 6 daily - all professional assignments, with teachers on per diem schedule. Most teachers employed for 185 work days (see pages 16, 17).

A FEW THOUGHTS CONCERNING THE FISCAL IMPLICATIONS OF THE YEAR-ROUND SCHEDULE

By Gene Henderson, Superintendent
Francis Howell School District
St. Charles, Missouri

An oft repeated question in the interviews with visitors here concerns the cost factors associated with the year-round schedule. Some authorities are sure it costs less; others, just as certain, say it must cost more.

The Francis Howell Board and Administration were eager to make cost comparisons and indeed such comparisons were the subject of a grant. A report was published. The results were not conclusive.

The practical results after two complete fiscal years of year-round operation are as follows:

1. The secretarial staff at the Becky-David Schools was increased sooner that it would have been had not the year-round schedule been implemented, but it never exceeded one secretary per 300 students. The ratio is now about one secretary to 400 students.
2. The maintenance and custodial staff expense has probably been exactly that which it would have been otherwise. Many buildings which are used long hours with great abuse are maintained in odd moments. The same can be done in schools. Some Francis Howell men have been scheduled Tuesday through Saturday, with Saturdays worked at Becky-David.
3. The bus drivers have been paid at a higher rate during June, July, and August. They have worked about thirty minutes in the morning

and thirty minutes in the afternoon. A short job still requires driving to and from the school. Their rates were increased 25-50%. This represents an approximate increase of 50¢ per student in average daily attendance on an annual basis. A second school has now been placed on the year-round schedule. Most twelve month drivers are now paid at the same rate as nine month drivers.

Further thoughts on fiscal matters which may apply to year-round school are:

1. The instructional cost per student can be raised or lowered at any time by spending more or less. An increase in such costs should not be attributed to the schedule because it is not a function thereof.
    - (a) The schedule change does not make additional materials or supplies necessary.
    - (b) The teacher-pupil ratio should not change unless someone wishes it changed. It is true that extended contracts are likely to go to higher paid teachers, but this too is a matter of choice.
2. The needed capital outlay per student should be reduced under the year-round schedule to about 80% of that which it would have been on the traditional schedule.
    - (a) Three rooms serve four classes of students.
    - (b) Three busses transport four complements of students.
    - (c) Three sets of furniture serve four sets of students.

(d) Offices, hallways, restrooms, parking lots, walkways, and sites all serve four students for each three previously served.

3. Finally, any expenditure deemed to be additional and attributed to the schedule change should be examined carefully since the implementation of a change is often the excuse for added expense, but not the reason.

FLEXIBILITY IN CURRICULUM AND CALENDAR

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THE YEAR-ROUND SCHOOL: The 45-15 Breakthrough, by Kenneth L. Hermansen and James R. Gove.
Linnett Books, 1971. xii + 154 pp. $8.50.
Reviewed by *Johannes I. Olsen*, principal, Champlain Valley Union High School, Hinesburg, Vermont.

An increasing number of school districts across the nation are facing crises in providing adequate housing for their students. Whether because of having reached the limit of bonding ability, as in the Valley View school district, or because of voter reluctance to provide additional construction funds, or because construction would not give relief soon enough – whatever the reason, it is clear that there is growing interest in year-round schools, and in "45-15" in particular.

The "45-15" concept is quite simple: Divide the student body into four equal groups, A, B, C, and D. Each group of students attends schools for 45 *school* days, then has 15 *school* days of vacation. This in-school, out-of-school pattern is repeated four times so that each group attends school for four quarters of 45 school days each, with vacations of 15 school days between quarters.

The space-saving characteristic of 45-15 is achieved by staggering the starting dates of the four groups. Group A begins school on day 1; Group B begins on day 16; Group C enters on day 31; on day 46, Group D enters and Group A begins its 15-day vacation. As a result, housing is needed for only 75% of the student enrollment, since at any given time three groups – three-fourths of the enrollment – will be in school and one group – one-fourth of the enrollment – will be on one of the 15-day vacations. Put another way, the effective capacity of the facilities has been increased by one-third.

Hermansen and Gove have provided us with an excellent history of the development of a 45-15 continuous school-year plan. It is must reading for any professional or lay person studying or involved in establishing a year-round school program. A major caution, though, to reinforce the concern of the authors: The book is a description of the process used to meet Valley View's needs and criteria. (Valley View's 45-15 program operates K-9; the high school, which is a separate district, is planning to implement 45-15 this summer.) You will undoubtedly agree with many of the Valley View administrative and educational decisions. You may also determine that the characteristics of your community and its educational aspirations and demands will require different decisions and applications of the 45-15 concept. Perhaps the greatest value of this book is its identification of many of the numerous areas in which decisions must be made.

The authors carefully point out that 45-15 is not an educational solution, per se. It is primarily an organizational scheduling device designed to increase school plant capacity. It "does not guarantee, or necessarily require, innovative program developments."

That 45-15 may not be an educational solution is its major drawback. *For unless the school is large enough, or unless the curricular program and instructional abilities of the staff are suited to a great extent to individualized learning, then 45-15 may not be possible without reducing curriculum opportunities for students.* This problem is probably more critical at the high school level, which, generally, has not moved toward individualized and other relevant programs at the same pace as the primary and intermediate levels.

Another drawback of 45-15 lies in its potential for continuing the inflexibility of school calendars for the sake of achieving maximum economies and the most efficient utilization of buildings. While these are certainly essential considerations, it is also very important to realize that the 45-15 concept provides the opportunity to open up the calendar and the school to make learning programs and experiences available at the times preferred by students and their families. In fact, if the student attending a year-round school is enrolled in a program including continuous progress, independent study, and similar individualized courses, he and his family can tell the school in which 175 days they prefer he come to school. But as it has been implemented in most districts, 45-15 is as rigid and mandatory as any traditional calendar.

Flexibility in curricular and calendar options becomes extremely desirable as it serves to strengthen program offerings and to capitalize on the capabilities of a good faculty and resourceful community. Indeed, in our community (Hinesburg, Vermont) excellent program and maximum flexibility for the individual were the essential expectations. That economy and space saving resulted too was simply frosting on the cake.

Our community would not accept 45-15 because of its rigid and mandatory nature. Our response has been a "multiple access curriculum and calendar" consisting of 16 nine-week quarters. It is similar to 45-15 in that each quarter is staggered to begin at about three-week intervals. A major difference is that students may elect to attend any four or five of the 16 quarters. Independent study and out-of-school programs may occur within or between any quarters. We know that we will achieve the maximum possible space saving (as is possible under the mandated 45-15) only by chance, yet we will achieve close enough to this point to suit our particular purposes. Our main purpose is to offer a calendar which serves primarily as a vehicle for the curricular program.

Readers interested in year-round schools should be cautious as they review the literature being published in ever-greater volume. It has been our experience that few publications have taken the time to research and document their statements concerning year-round school programs and operations. A case in point is the *Kappan* itself; another is the recent NSPRA Special Report on year-round schools. Both reported that we had implemented 45-15 and, after several weeks of operation, had encountered such opposition that we stopped. In fact, the decision not to implement 45-15 was made in the spring. Neither publication asked us for information. With such misstatements about our situation, I hesitate to accept their statements – whether of success or failure – concerning other school districts without checking with those school authorities.

Fortunately (and in part due to several grants), the Valley View process is thorough and well-documented. *The Year-Round School* is an exciting tale of modern administrative pioneers. Hermansen and Gove have authored a primer on year-round school operation; it now remains to develop the "organizational device" as a viable educational concept.

CURRICULUM FACILITATORS

FLEXIBILITY IS ENHANCED BY:

-- Multiple entry courses
-- Continuous progress courses
-- 3, 6, 9, and 18 week courses
-- Open laboratories (science, industrial arts, home economics, etc.)
-- Student unstructured time
-- SOPE
-- DUO umbrella
-- Aides - instructional
    technical
    clerical
    supervisory
-- Resource centers
-- Abolition of the Carnegie Unit
-- Local Certification
-- Establishment of behavioral objectives for each course and for each student in a course

Lengthy Vacations

Slow Learner

Sickness

These three situations all make use of - and benefit from -- the flexibility of the "45-15" calendar.

A student planning (with his family) a lengthy vacation can so notify the school in advance. If, for example, the student is placed in Group A and completes the first quarter (September 24th), he can return at the beginning of the second quarter in Group A (October 18th), Group B (November 10th), Group C (December 2nd), or Group D (January 3). He can begin the second quarters of any of these four entry points without loss of instruction.

The slow learner, who can usually be identified before the beginning of the year, can be enrolled in Group A, for instance. If he experiences great difficulty in his classes, to the point where he would benefit from repeating work, the student can be easily moved to Group B (3 weeks behind A), to Group C (6 weeks behind A), or to Group D (9 weeks behind A).

Sickness, particularly of several months' duration, is better handled in the same way, and with less loss of instruction.

CALENDAR POSSIBILITIES

(Specific examples on following page)

House A		House B		House C	House D	Other
AAAA	ADCD	BBBA	BDCD	CBAA	DCBA	$A_1D_1C_2B_3A_4$
AABA	ADDC	BBBB	BDDC	CBAB	DCBB	
AACA	ADDD	BBBC	BDDD	CBCB	DCBC	etc.
AADA		BBBD		CBAC	DCBD	
AABA		BBAB		CBAD	DCCB	
AABB		BBAA		CBBA	DCCC	
AACB		BBCA		CBBB	DCCD	
AACC		BBCC		CBBC	DCDC	
AADC		BBDC		CBBD	DCDD	
AADD		BBDD		CBCC	DDCB	
ABAA		BABB		CBCD	DDCC	
ABAB		BABA		CBDC	DDCD	
ABAC		BABC		CBDD	DDDC	
ABAD		BABD		CCBA	DDDD	
ABBA		BAAB		CCBB		
ABBB		BAAA		CCBC		
ABBC		BAAC		CCBD		
ABBD		BAAD		CCCB		
ABCB		BACA		CCCC		
ABCC		BACC		CCCD		
ABCD		BACD		CCDC		
ABDC		BADC		CCDD		
ABDD		BADD		CDCB		
ACBA		BCAA		CDCC		
ACBB		BCAB		CDCD		
ACBC		BCAC		CDDC		
ACBD		BCAD		CDDD		
ACCB		BCCA				
ACCC		BCCC				
ACCD		BCCD				
ACDC		BCDC				
ACDD		BCDD				
ADCB		BDCA				
ADCC		BDCC				

POSSIBLE CALENDARS

45-15

1. Accelerated
2. Sept. 27 to June 15 (DCBA) Traditional Vacations
3. Sept. 7 to May 26 (CBAD) Traditional Vacations
4. Aug. 16 to May 5 (BADC) Traditional Vacations
5. July 26 to April 14 (ADCB) Traditional Vacations
6. July 26 to June 15 (AAAA) 45-15
7. Aug. 16 to May 29 (BBBB) 45-15
8. Sept. 7 to Aug. 8 (CCCC) 45-15
9. Sept. 27 to Sept. 7 (DDDD) 45-15
10. July 26 to July 7 (AAAB) 45-15
11. Sept. 7 to July 7 (ABBB) 45-15
12. July 26 to June 15 ($A_1D_1C_2B_3A_4$) Accelerated

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MULTIPLE ACCESS
CURRICULUM AND CALENDAR
at
CHAMPLAIN VALLEY UNION HIGH SCHOOL

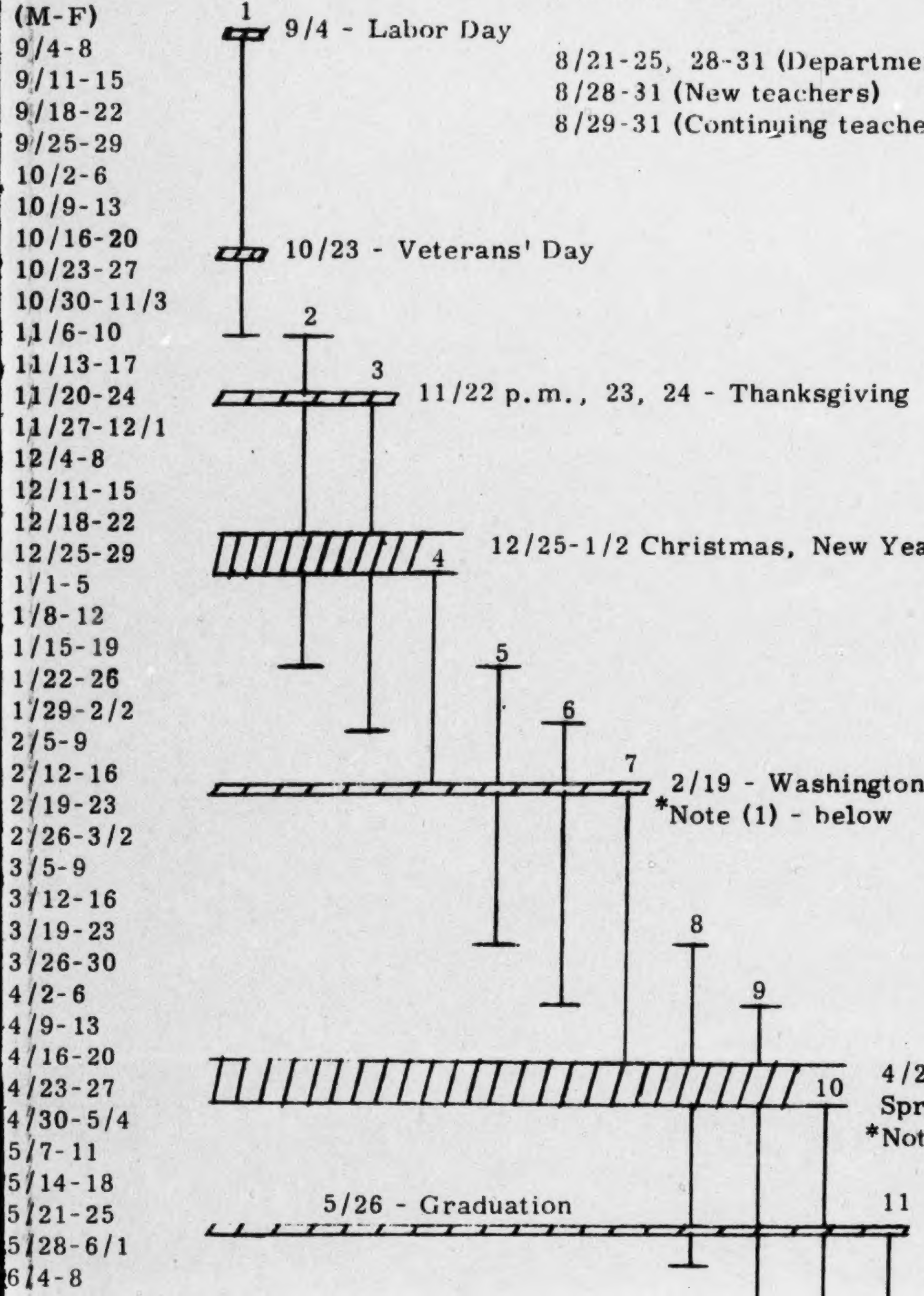
Hinesburg, Vermont

The Multiple Access Curriculum and Calendar

The "Multiple Access Curriculum and Calendar" is first and foremost an educational plan. The term "multiple access" simply means that learning programs and experiences are available to students at several or more times during the school year. The ultimate goal is "open access", so that the student will have complete ability to select his starting times and dates of attendance.

The multiple access calendar does not abolish the traditional school year for those who like that calendar best, but does provide the flexibility for students and their families to elect other school attendance (and vacation) times. (For the first year of implementation, in order to effect a gradual phase-in of the year-round program, we have modified the calendar to offer eleven rather than sixteen 9-week quarters.)

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Calendar for 1972 - 1973



9/4 - Labor Day

8/21-25, 28-31 (Department Chairmen)
8/28-31 (New teachers)
8/29-31 (Continuing teachers)

10/23 - Veterans' Day

11/22 p.m., 23, 24 - Thanksgiving

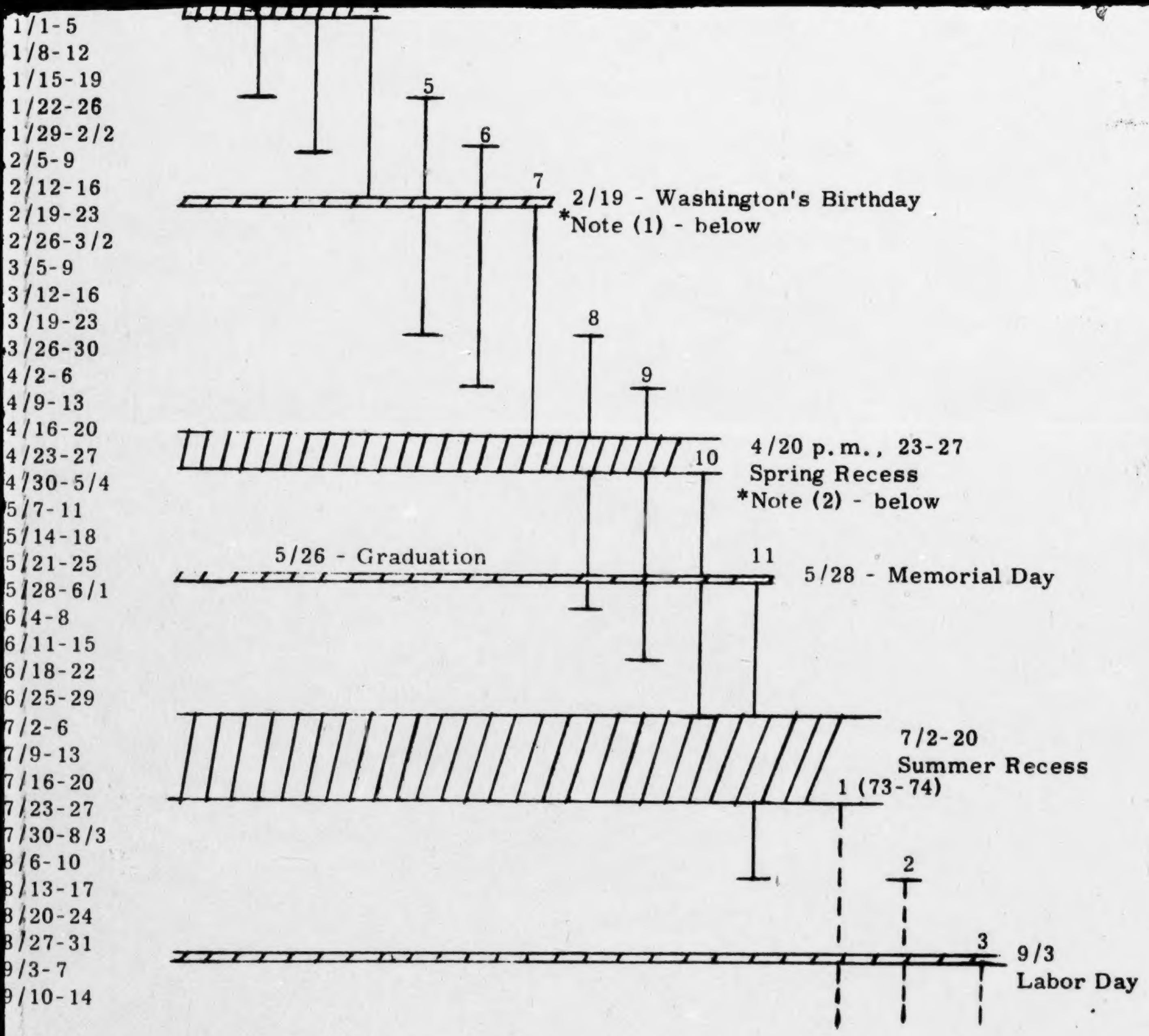
12/25-1/2 Christmas, New Year's

2/19 - Washington's Birthday
*Note (1) - below

4/20 p.m., 23-27
Spring Recess
*Note (2) - below

5/26 - Graduation

5/28 - Memorial Day



* Note (1): 2/20-23 are designated "Superintendent's Days" for in-service workshops and conferences. No classes.

* Note (2): Days needed (because of school closings) to meet 175 day minimum will be made up during 4/27, 26, 25, 24, 23 (in that order).

The multiple access calendar might be best understood if a brief history of what underlies its inception were offered.

About CVUHS

The Champlain Valley Union High School is entering its ninth year of operation.

Five towns, each with its own Board of School Directors and K-8 system, comprise the high school district. The high school has its own Board of School Directors and is an autonomous agency with respect to the elementary districts. Prior to the opening of the regional high school, the towns either operated a K-12 system or sent their secondary students to nearby high schools. All members of the five elementary and one high school board constitute the membership of an umbrella organization called the Supervisory District.

C.V.U. opened in the fall of 1964 with an enrollment of about 460 students in Grades 9-12. We have well over double the original enrollment now.

The building capacity of C.V.U. is 750 students. The growth rate of the member towns just eight years ago anticipated capacity enrollment in about 1972. Within a year of the school's opening, however, the towns began to grow at a wild pace and the capacity figure was exceeded during the 1967-68 school year. In the spring of 1968 a 3-million dollar bond issue was twice defeated. Four temporary classrooms were added in 1969 and again in 1970 pending a solution of the space problem.

Our purpose as a public school: John Gardner has written that "education is inevitably an attempt to shape the future." The schools share with the home and other institutions the awesome responsibility for education.

Our primary purpose as a public school is to prepare students for the full responsibilities of American citizenship and to guide them to the threshold of that experience. This means that a high school education should involve much more than just preparation for college or a job. We believe that the process of education must concern itself with the development of individuals. The opportunities for fulfillment of individual promise rely in large measure on the extent to which the student is able to define his goals, act responsibly, and make sound judgments. The talents of each student need to be sought out and developed to the fullest; each weakness should be studied and, so far as possible, corrected.

There is uncertainty--and unlimited opportunity--for today's youth. As he enters the ever-changing world of work and higher education, he may move rapidly from one career area to another, find long-term employment in a now unknown occupation, or--lacking the necessary basic education and skills--even face the possibility of life-long unemployability.

Where are we going? We have the sober warning that the future is not fixed. Man is not being guided inevitably to a desirable future. What, then, must the school, the home, and other institutions do? We must provide the knowledge (old and new!), attitudes, and skills which our children will need to survive, to live fully as human beings, and to cope wisely with the personal and social choices they must face. And we must find better ways to provide these--better ways for students to learn and absorb them.

Community considerations: The community comprising the Champlain Valley Union High School district expects quality program, reasonable expenditures, and critical appraisal of the program and operation.

Today, through the benefit of hindsight, we can better appreciate the mammoth undertaking we set for ourselves in 1970 as we proposed adoption of the 45-15 concept.

We erred in stating that 45-15 was simply a revision in calendar. The point we were trying to make was that merely implementing a 45-15 calendar accomplished nothing in terms of program, curriculum, and the like. We were attempting to emphasize that it was only with adoption of a 45-15 calendar AND the implementation of a highly desirable program, taking advantage of all the new opportunities made available, that the 45-15 concept was extremely desirable. The community and the school were seeking the same goals--excellent program and maximum flexibility--but we did not understand each other sufficiently.

As a result of the controversy which followed, not the least of which concerned the matter of per diem for teachers, it was decided to continue with a traditional school year calendar during 1971-72. At the same time, the Board offered all members of the community the opportunity to participate with Board members, faculty, and students in discussions of the problems facing C.V.U.

Innumberable hours of effort were devoted to the school for a period of several months by the many persons serving on the numerous committees and sub-committees. There were clear signs of a common spirit from the beginning. It was obvious that everyone serving on the committees, virtually without exception, was proud of the Champlain Valley Union High School and very jealous to safeguard its program and to further its potential. The result was a very excellent and extensive report to the Board.

The following is a condensation of the goals for the school recommended by the committee:

1) Restructuring the curriculum, placing increasing responsibility on the learner and utilizing the community as a laboratory for learning.
2) Expanding the core facility, C.V.U., to facilitate contemporary learning needs.
3) Promoting options which have objectives. Some examples would be:
    a. 3-year graduation
    b. DUO
    c. Independent Study
    d. Year-round operation
    e. Alternative staffing or free school within the system
    f. Differential staffing insuring maximum teacher talent
    g. Individualized instruction
4) Provide a quality education for each student which would assure him of the following:
    -- an understanding of himself and his relation to society as a human being
    -- an understanding of all peoples of the earth, their cultures, ethnic background, social structure
    -- a mastery of the basic skills in use of words and numbers
    -- a positive attitude toward learning
    -- development of responsible citizenship

- the ability to create social and physical environments capable of sustaining and promoting productive human life
- the ability to maintain physical and emotional health
- the encouragement to be creative and inventive; we must stop rewarding the analytical mind alone
- the understanding and appreciation of human achievement in the natural sciences, social sciences, humanities and arts
- the preparation for a world of rapid change and unforeseeable demands

Basic learning, competition, etc: Many in our community comment that our curriculum booklet seems more like a university catalog. Some wonder if the school, in its pursuit of "relevance," has eliminated much of what was considered "basic learning." Such comments emphasize the need for understanding the shifting priorities in education and the changes in our responsibilities and functions.

For example, the classics of literature which were the standards of Language Arts instruction have not diminished in value. Yet the knowledge explosion which is upon us, which now doubles the amount of useful knowledge within a decade, has required a broader scope of offerings and a shifting of priorities so that all periods of literature receive somewhat equal emphasis, including the contemporary.

Other changes have occurred. The increased availability, scope, and influence of such media as film and television have also caused a shifting of priorities so that all media (including literature) receive the emphasis necessary to give our students the ability to appreciate, understand, and react intelligently to them.

Very often, too, the school tended to promote the segregation of students with different social and educational abilities and aspirations--not intentionally, but by the nature of the course offerings. Because the school's goals include preparation for involved citizenship, it seems very desirable to minimize such differences and to encourage students to communicate well and effectively with others of different abilities and aspirations.

The curricular program places great emphasis on both academic and non-academic challenges but on an individual rather than on a mass basis. This is the major difference between present and past practice. There are more than enough students at all levels of ability to sustain the competitive spirit within classrooms. If anything has changed, it is that the opportunities to compete have been increased. Also, that the opportunities to "know thyself" have been increased. Where a course is offered for students of a particular range of abilities, the course is planned for those students. The course is not just a milder dose of the high academic program.

Courses of varying lengths: In the past, there were usually only year-long courses offered -- English 9, for example. All 9th grade students elected "English 9." Students with different academic abilities were sorted into separate classes. The content for each lower ability level was "watered down" just a little more than the last. Most, if not all, classes were based on the college-preparatory curriculum.

In year-long courses, such as English 9, one teacher taught the class for the whole year. This implied that the teacher was highly proficient in all of the areas studied: literature, composition, reading skills, speech, etc. More often than not, the teacher's background and interests were in one or two of these areas only.

When courses of varying lengths -- whether 3, 6, 9, or 18 weeks -- are offered in place of year-long courses, teachers can be used more effectively -- and to their greater satisfaction -- by concentrating the teachers' instruction in the areas of their greatest interest and competence. The same benefits can be enjoyed by students whose interests likewise are varied.

(It is important to note here that the curricular options are not "wide open." In the Language Arts, for example, all 9th and 10th grade students are required to elect "Writing Workshop;" the "Developmental Reading" course is required of those students needing this instruction; a minimum number of units must be elected in the areas of writing and literature.)

Courses of varying lengths do not increase the costs of instruction. They require the same number of class sections and teachers as year-long courses, but no more. It probably seems more expensive because it takes more courses (and their descriptions) to equal one year-long course.

There is another very important reason for offering courses of varying lengths. This is that courses should -- and now can be -- designed with specific behavioral objectives in mind. That is to say, courses can now be based on what it is we want the student to learn, achieve, and/or experience, not simply on the amount of time available.

For different students, this may be a matter of weeks, months, or years. The diagrams on the following page illustrate the two concepts we are dealing with.

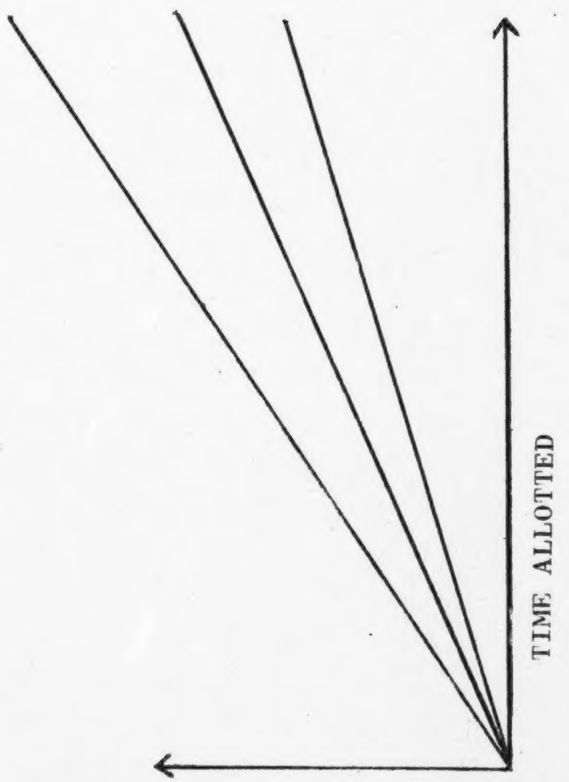
The upper diagram illustrates a course in which time is the constant for all students. American History, for example, is usually a one-year course in high school. With a bright class, you move quickly and accomplish more either in terms of material covered or enrichment experiences. With a slower group, you move more slowly and accomplish less.

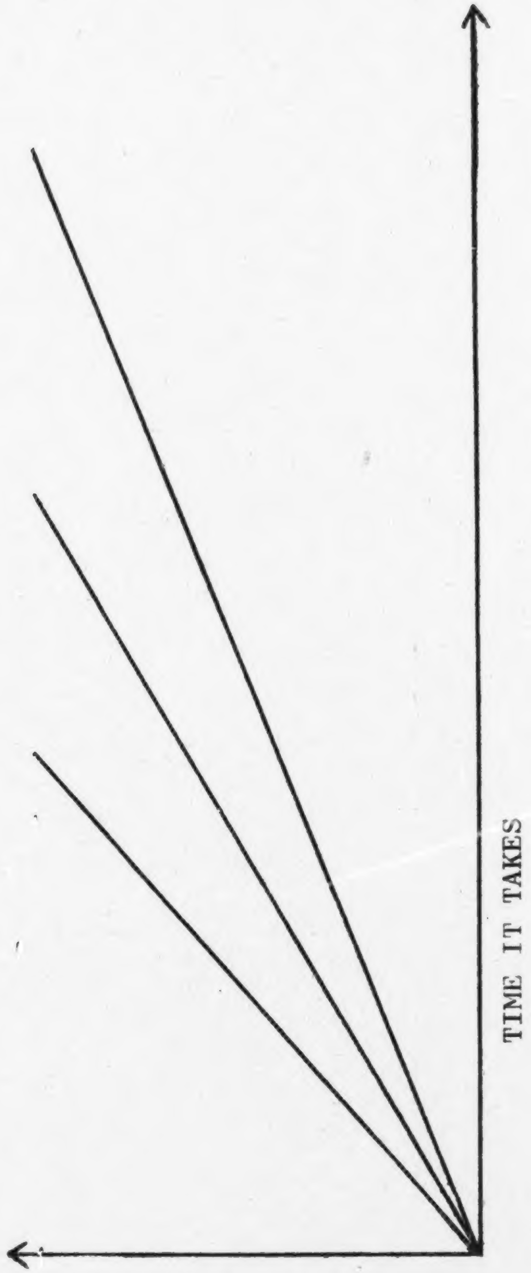
The lower diagram illustrates a course in which the skill level desired is the constant for all students. If you forgot for a moment that U.S. History is a year-long course, and thought instead of what it was you wanted the student to accomplish through a study of American History, wouldn't you have to arrive at some different and varying time patterns?

The lower diagram is the "continuous progress course" concept. This is an individual or group situation in which the student progresses through the course at his own pace. Periodic hurdles are set up which the student must overcome before progressing to the next phase or unit. Periodic is used to denote learning phases or units, not time intervals. A minimum achievement level is established for each hurdle, usually at about the 80-90% level. The course has no length--the student completes the course when all the hurdles have been overcome, when all the course objectives have been achieved.

The teacher's role is critical and vital! The teacher is available to the student as needed by the student. The teacher's role also involves prodding, if the student isn't moving as quickly or achieving as well as expected; braking, if the student seems to need to go slower; anticipating potential difficulties for each student; and the like.

There are ordinarily no teacher-to-the-whole-classroom presentations. Because of its individual nature, a student can begin the


TIME ALLOTTED
SKILL LEVEL ACHIEVED


TIME IT TAKES
SKILL LEVEL DESIRED

course at any time during the year; by the same token, absence for sickness or a vacation is no problem since the student will miss no class presentations--when he returns he simply does the necessary review, depending on the length of his absence, and picks up where he stopped working before the absence.

Open Laboratories: Group presentations are useful in many classroom situations, but when better learning is possible by creating individual learning situations, then such should be employed. One instance is the open laboratory concept in science. Rather than a class, by-the-members, approach to science experiments by students, we let students schedule themselves for laboratory experiences. Some students will finish more quickly than others; some, in order to learn better, will repeat experiments. Absent students aren't deprived of that particular experience. In terms of facilities utilization, science labs are available all day for laboratory experiences -- science classes can meet in regular classrooms for the most part -- and fewer science laboratory facilities are needed.

Independent study: This concept provides opportunities for students to meet course objectives in different ways as well as to create unique courses or special curriculums for particular individuals.

This is often done for students confined to bed during a lengthy illness. Another instance may be a novel substituted for another novel being studied by a literature class. The substitution may occur because the student wants, but cannot be scheduled for, a particular course. Or the substitution may occur because of the student's or his family's objections to the novel being studied in class. Or the substitution may occur because the student is already very familiar with the novel. Or because the student's background, experience, previous study, or special abilities suggest a better learning experience if a part of--or the whole course is accomplished independent of a class situation. Independent study is often an individual situation, but can be a group situation too.

Independent study programs, as well as others, operate best as student-faculty contracts in which the student contracts with the teacher/advisor to accomplish the stated objectives. Explicitly stated should be the logical consequences of matters such as the student's learning, or lack of learning, and effort, or lack of effort.

ISDA - Individual Student-Directed Activities: ISDA is that aspect of the school program which has given students the responsibility to decide for themselves what they will do during "not-in-class" time. ISDA offers opportunities to use unscheduled time in a variety of ways and under limited supervision:

...take a break
...become involved in work-experience program
...attend films and lectures
...audit classes
...consult with guidance counselors
...toss a football around on one of the fields
...work on independent research
...elect a DUO project
...study in small groups
...just sit around and chat
...help others by offering to tutor
...assist in Head Start or help out in the elementary schools
...go to one of the department resource centers
...work in the art room, shops, science labs, and music rooms--
    you don't have to be in a course to use the facilities
...eat breakfast and lunch
...have conferences with teachers
...join one of the service organizations
...work out in the gym
...enjoy the out-of-doors, except by classroom areas
...participate in mini-courses and club activities

With the exception of Freshmen, who are initially assigned to study areas, and students who are found to be unable to handle the responsibility, the entire student body is involved in the ISDA program. The program provides the student with the opportunity to experience the considerable freedom that he has after high school graduation but at a time when the home and school can still exert considerable influence in its use. We would rather have the initial failures and crises occur now, rather than in college or on the job -- we would rather have them occur now when the results will be less disastrous and the problems more easily remedied. Both the personal and school problems of students are much more noticeable in a program such as ISDA -- which also gives us the opportunity to be more aware of the problems and to work more closely with the students and family in solving them.

SOPE: During the 1969-70 school year, the regular curricular program was set aside for a week and replaced by a curriculum of more than 200 courses, both in and out of school, which was planned, determined, and executed by the students. We called this program SOPE -- Student Organized Project in Education. As described in one of the informational bulletins sent to the community residents, "SOPE is a unique experience that considers learning to be a 24-hour process and makes the entire community the school." SOPE was not intended to be an isolated week in the school year, but is evolving into a program of continuing year-round learning opportunities in which alternative offerings and situations play a major role.

DUO is one of the permanent on-going programs which evolved from SOPE in which students have the opportunity to learn by utilizing the many and varied resources in the community. They may perform a service at the same time they learn new skills or share their talents and the learning they have acquired in school. They may teach in an elementary school, work in a social service agency such as the hospital, or they may learn a craft or a trade by apprenticing to a business or to a master craftsman. DUO projects are designed by the individual student to meet his special needs and interests, and, with the guidance of his parents and teachers and the resources provided by the Direction Center, the student may elect and schedule a full DUO program for a period of three, six, nine, or eighteen weeks, or he may elect a "partial" DUO program which allows him to plan a project in the morning or afternoon or on one day a week only. The Direction Center will help the student select an experience in conjunction with his regular in-school program.

Academic credit may be received, the number of credits being determined by the nature of the project and the time devoted by the student to the program, as well as on the basis of evaluations of the project made by the student, the sponsoring agency, and by the DUO Coordinating Committee. The student plans his program and submits his application to a student-faculty committee. The application must be approved by his parents, teachers, the DUO agency in which the student will work, and by the Direction Center.

The Direction Center provides a variety of programs for the student. In addition, new programs can be created by the student, by the Direction Center, and by the Citizens' Advisory Committee, a group of parents and other interested citizens who serve as resources, planning new programs, visiting DUO agencies, and generally sharing their own experiences with students.

About 250 students participated in DUO programs in 1971-72: more than 100 students as teacher assistants in the district elementary schools, kindergartens and nursery schools; about 50 young people at the Medical Center. Social Service agencies to which high school students have contributed their services have been Vermont Legal Aid, Planned Parenthood, SHAC, Crossroads, Baird Children's Center, Howard Family Service, OEO, etc. Seventeen students studied, did research, or worked at the University of Vermont. CVU faculty developed new work-study programs for a number of students in television and radio stations, TV and automobile repair agencies. Retail stores also provided experiences for students in sales and office work. Various apprenticeships in Arts and Crafts, Theatre, and Photography were developed. Several programs will be offered this summer and next fall on a full-time basis to students interested in learning how to operate a dairy farm. A number of related farming projects such as organic gardening, bee-keeping, and showing cattle, etc., will also be available.

Several new programs designed to provide students with the opportunity to explore career interests have been designed by both school and community resources. A member of the DUO Citizens' Advisory Committee has developed a program, "Introduction to Science and Engineering in Industry," a 9-week course offered in the mornings, in which a student will serve in nine or ten local industries for a week at a time, the group coming together on one morning each week for a seminar in which personnel in industry will participate. A "Health Careers Course" is planned and coordinated by the Visiting Nurse Association in collaboration with the DUO program.

Differentiated staffing: A fancy term which means we try to use all members of our staff in the most effective ways possible. The concept is also economically sound. (Our concept may be somewhat different than general use of the term.)

We use professional faculty, for example, only for the professional functions for which they were employed. The primary functions are directing and supervising students' learning, providing and improving present instructional programs, and developing curriculum. We are concerned with "professional load," not "teaching load."

Less-skilled and lower-salaried personnel are employed for those functions which they can perform as well as, or better than, professional teachers. Among the numerous examples of these functions are filing of student papers, typing tests, running off ditto masters, correcting True-False and multiple choice tests, supervising corridors, the cafeteria, and the like.

Instructional and technical aides, often working directly with students, supervise open laboratories, media and department resource centers, and the like.

An important aspect of differentiated staffing is salaries. Included in the 1971-72 agreement is this statement: "It is the joint goal of the Board, Administration and Professional Staff to change the present method (present salary schedule concept) of compensating the professional staff to a method which will provide compensation on the basis of professional effectiveness."

Among the proposed criteria are professional qualifications; authority and responsibility; tasks, duties, and job goals; and situational factors. Each of these four general categories are broken down to items, each with a value range. Each staff position will have a maximum value range or potential.

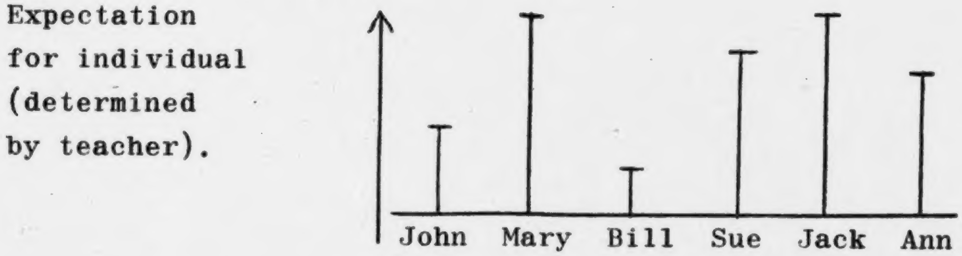
Alternative staffing: First, let me clarify the term "alternative"; it is not an attempt to replace teachers. Rather, in much the same way that our DUO program might be called "alternative education," we are working to add to and enhance learning opportunities for students. As in the case of differentiated staffing, which is an elementary form of alternative staffing, we are seeking to redefine the role of the teacher. But even more than that, we are looking to utilize all resources in different and expanded roles. If the professional staff member is in fact a "director of learning experiences," in contrast to the "stand-up-in-front, chalk-and-talk" teacher, then his traditional roles must be remodeled. Additional, probably nonprofessional, "teachers" will be utilized to help provide richer, more meaningful learning experiences. Often, this means new environments too, and ultimately, new definitions of such terms as course, program, school, the "system," and the like.

Most teachers are not prepared, philosophically or experientially, for assuming such new roles. We are now involved in an Alternative Staffing Program, funded by the New England Project in Teacher Education and Title III. We hope to be able to establish and demonstrate some additional viable models of alternative staffing.

Reporting Student Progress: Report cards are issued at the end of each quarter or course. In addition, at any time during a course, interim reports are mailed to the parents when the teacher is 1) especially pleased with the student's work or 2) concerned that the student is not progressing well. We encourage student and parent conferences with the faculty throughout the year.

Our philosophy encompasses two goals: 1) to establish individual goals for each student in each course within the framework of the general course objectives; 2) to provide an accurate reporting of the student's skill achievement, and other important matters.

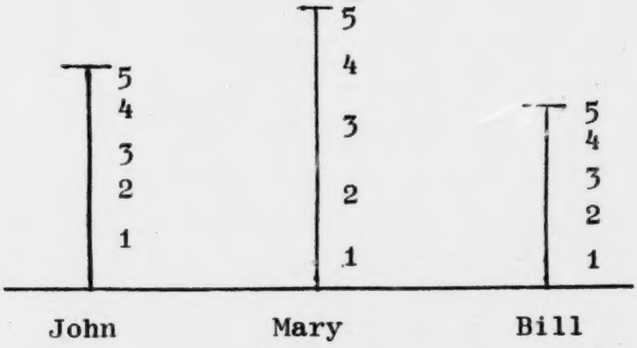
If we expect that a student working at his full potential will achieve at a level different than others, our expectations for a class might look like this:



These expectations may be defined as skills to be learned, the level of skill to be achieved, information retained, concepts understood, values learned, and the like. The expectations for a specific student are based on past performance, standardized testing results, other pertinent data, and professional judgment.

In the case of continuous progress courses, in which the skills to be learned, for example, are the same for all students, the expectations may be in terms of time needed.

The extent to which a student lives up to the expectations for him is reflected in the "effort-ability index," a scale ranging from 1 (lowest) to 5 (highest):



Whatever the reporting system, how can the grade be made to tell just what the student has learned? A, B, or C does not really say much about

...the number of words per minute that a student can type
...whether a student studying French is equally proficient in conversation and reading
...which of the Social Studies course objectives are being met, and how well
...etc., etc.

Where we need to give a better indication of actual achievement, we provide additional information.

In the case of Typing, for example, we report on such matters as Typing Techniques, Work Habits, Speed, Accuracy, Following Directions, Proofreading, Erasing, Completion of Assignments, and Types of Problems Completed This Quarter. We feel such a report provides more and better information than the traditional grade to the student, his parents, and prospective employers or colleges.

Our philosophy of grading does not lend itself either to "Honor Rolls" or computation of "Rank in Class." In practice, this has presented no problems for the school or been a handicap to our students. Indeed, we recently received the following letter from the Admissions office of an out-of-state, nationally recognized institution:

"Just a short note to commend you and your associates for the kind of job you are doing relative to providing college admissions offices with very informative and, more important, very human application folders. After reviewing ________'s folder I felt as if I knew something about him as a person. The teacher comment sheets coupled with the very thoughtful recommendations are great. Keep up the good work. You are doing your students a great service.

P.S. ______ has been accepted and will hear from us shortly."

Student Rights and Responsibilities: It is the goal at C.V.U. to achieve the balance point where the principle of order and the principle of liberty meet. We reject the extremes of both principles--standardization and regimentation on the one hand, and license and anarchy on the other. At the same time, we understand that consideration must be given to the relative maturity or immaturity, as the case may be, of the persons comprising the student body.

We are committed to that necessary and reasonable exercise of authority by school officials which will best serve to maintain and encourage student rights while inculcating, encouraging, and maintaining in students a sense of individual responsibility and citizenship.

Discipline is an individual matter and its purpose is to change undesirable behavior -- and more important, the attitudes which bring about that behavior. We believe that behavior controls should be flexible -- that discipline should be firm, fair and consider the unique elements of each individual situation. Punishment, in the sense of exacting revenge, is not a part of our disciplinary policy.

Every discussion of rights and responsibilities reaches toward the underlying concept of fairness. Here, as in the discussion of the ISDA program, two factors predominate: consideration for yourself and consideration for others.

The school often finds itself at the point where conflicting wishes and ambitions of students, faculty, parents, and other residents collide. It is the administration's role to try to make these divergent interests compatible so that the school can be what it is intended to be, a place where learning can take place.

CVUHS STUDENT PROGRESS REPORTS

(Samples)

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101

Arts Department
Achievement Report

Dear Parent:

The Art Curriculum includes surface and indepth study of these art areas: painting-watercolor, tempera, and oils, (advanced art students); 3-dimensional work in mobiles and sculpture, using a variety of materials; 2-dimensional study in design, representational drawing, print making, collage and calligraphy. Art history and appreciation for the fine arts are also stressed and incorporated in the art program.

True art reflects the personality of the artist and has meaning or purpose. In the visual arts this purpose is expressed by the organization of the visual elements; color, line, value, form and texture. Evaluation is intrinsic to the teaching of art, and each quarterly evaluation will contribute to the art student's selection of purpose and the art teacher's direction in planning art experiences. The following are my criteria in evaluating an art student:

_____ 1. Personal responsibility -- completion of course work attendance

_____ 2. Evenness of performance

_____ 3. Diversity of expression - originality

_____ 4. Depth of understanding of concepts and techniques

_____ 5. Pursuit of independent study

_____ 6. Consideration for others and the art room facility

INDEX 1 2 3 4 5

Minimum - 1 Maximum - 5

Student Name ____________________	Parent conference requested YES NO
Class __________ Homeroom __________	Effort ability index 1 2 3 4 5 (Minimum - 1 Maximum - 5)
Subject/level ____________________	
Teacher ____________________	Final grade at end of course ______
Class absences this report period ____	Unit of credit earned ______

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101

Industrial Arts Department
Achievement Report

WOODWORKING I

Dear Parent:

This Achievement Report is designed to show how ______________ is progressing in Woodworking I. The following brief statements show what is expected of each student with respect to the following goals and objectives:

1. An understanding of the woodworking industries, including sources of lumber, how lumber is made into wood materials, how wood projects are designed and produced, and how people earn a living in the woodworking industry.
2. Development of the student to design, plan, and carry through a project in wood.
3. To teach the basic skills in woodworking that are useful to everyone, regardless of the aim in life.
4. Develop in the student how to work safely with woodworking tools and materials, and to protect themselves from accidents.
5. An understanding of consumer values by learning how to order lumber, plywood, finishing materials, and hardware.
6. Stressing the conservation of our natural resources by showing the value of our forests and how they can be preserved.

Student Name ______________________
Class ____________ Homeroom ____________
Subject/level ______________________
Teacher ______________________
Class absences this report period _____

Parent conference requested YES NO
Effort ability index 1 2 3 4 5
(Minimum - 1 Maximum - 5)
Final grade at end of course _____
Unit of credit earned _____

51

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101

1971-72

REPORT OF PROGRESS IN TYPING I

Typing I is designed to provide each student with a basic vocational skill. It is a prerequisite for Typing II, Secretarial Procedures, and Clerical Office Procedures.

During the first several weeks of the course, emphasis is on the development of proper keyboard control and techniques, proper stroking, knowledge of the operative parts of the typewriter, and good work habits. As early in the course as possible each student commences work on assignment sheets which he completes at his own rate. As the year progresses, the student will apply his typing skill to a variety of problems such as proper placement of material, letter styles, envelopes, carbon copies, tabulation problems, manuscripts, and simple business forms.

Throughout the course, considerable time is spent on various types of drills designed to improve the student's basic typing skill in terms of both speed and accuracy. Related knowledges and skills to be developed during the course include recognition and skillful correction of errors, correct word division, proper punctuation and capitalization, careful planning and organization of work, and the ability to complete an assigned task within a reasonable period of time.

Typing Techniques ________	*Following Directions* ________
Work Attitudes and Habits ________	*Proofreading* ________
Speed (straight copy) ________	*Erasing* ________
Accuracy ________	*Completing Assignments* ________

(Excellent, Good, Average, Poor, Failing)

Types of Problems Completed This Quarter ________

____

Student Name ________	Parent conference requested YES NO
Class ________ Homeroom ________	Effort ability index 1 2 3 4 5
Subject/level ________	(Minimum - 1 Maximum - 5)
Teacher ________	*Final Grade* ________
Class absences this report period ________	Unit of credit earned ________

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101
Foreign Language Department
Achievement Report

FRENCH III

Your son/daughter has been studying French the 3rd quarter through one of the three options stated below. Indicated is the approach used and what was accomplished.

LARGE GROUP _____

1. _____ Given _____ readings by French authors, the student will be able to read and comprehend the stories so as to answer correctly all questions within an 80% range of accuracy.
2. _____ Given _____ readings, the student will be able to participate in an oral discussion of each story by voicing his opinion in French at least once.
3. _____ Given a written proficiency test on 4 grammatical structures, the student will be able to write the answers within an 80% range of accuracy.
4. _____ Given the play, Pelleas et Melisande, the student will be able to discuss the major points either orally or in written form within an 80% range of accuracy.

SMALL GROUP _____

1. _____ Given the test, Village en Vaucluse, the student will be able to read and comprehend the stories so as to answer all written questions within an 80% range of accuracy.
2. _____ Given the same text, the student will be able to discuss in French the main ideas in each story by voicing his opinion at least once.
3. _____ Given a programmed text, La France, the student has completed _____ proficiency tests within a 70% range of accuracy.
4. _____ Given a class situation, the student will strive to improve himself orally by conversing in French with the members of his group on a daily basis.

INDEPENDENT _____ (student selected between #1 and #2)

1. _____ Given a programmed text, La France, the student has completed _____ proficiency tests within a 70% range of accuracy.
2. _____ Given a written proficiency test on 9 structures, the student will be able to write the answers within an 80% range of accuracy.
3. _____ Given 3 books by French authors, the student will be able to read and comprehend the stories so as to write in French a 1-2 page summary.
4. _____ Given 3 Foreign Service Institute Dialogues, the student will be able to read the dialogues with near-native pronunciation, answer 8 out of 10 questions and supply the English equivalents.

Student Name _______________
Class _________ Homeroom _________
Subject/level _______________
Teacher _______________
Class absences this report period ____

Parent conference requested YES NO
Effort ability index 1 2 3 4 5
(Minimum - 1 Maximum - 5)
Final grade at end of course _____
Unit of credit earned _____

SOCIAL STUDIES - U.S. HISTORY
Specific Objectives to Achieve Goals

The extent to which the student;	Failure	Poor	Needs Improvement	Satisfactory	Exceptional
...when given hypotheses about economic development and evidence in historical essays, is able to state generalizations about economic development in terms of natural, capital, and human resources.					
...when given data in statistical tables and charts is able to read and interpret that data.					
...knows that a combination of natural, human and capital resources promoted American economic development.					
...knows that industrial growth changed the patterns of life and work for many Americans.					
...knows the extent and importance of American industrial growth between the end of the Civil War and 1929.					
...knows some of the problems in association with the settlement of the western frontier.					
...knows the significance of railroad growth in the U.S. as a factor in settlement and business and government regulation.					
...is able to associate the interrelationships of the development of industry and government involvement in many spheres of American economic life.					
...takes an active and positive part in class activities, follows directions and works productively as an individual and in small groups.					
...shows an open mind in class discussions and reaches conclusions about issues after investigation and debate.					
...demonstrates an understanding of the basic classroom procedures and values of: punctuality, class attendance, and completion of homework including missed work.					

SOCIAL STUDIES - U.S. HISTORY
Specific Objectives to Achieve Goals

The extent to which the student	Failure	Poor	Needs Improvement	Satisfactory	Exceptional
...knows that many current reform movements have historical roots.					
...knows that reform movements appear when a significant number of people become distressed with some aspect of society.					
...knows that a reform movement, as opposed to revolution, is a non-violent mode of change which relies on persuasion, assembly, speech, pressure-group activities, and sometimes civil disobedience to gain its goals.					
...knows the customs and laws of war which were established at the Hague and Geneva conventions.					
...knows that our nation established and tried to maintain a position of non-entangling alliances in our early history.					
...demonstrates awareness of current events in U.S. history.					
...participates in class activities.					
...is able to work effectively with a small group of students in researching and presenting to the class their findings concerning a reform movement in U.S. history.					
...is able to apply the principles of Nuremberg (crimes against: peace, conspiracy, humanity, and the laws of war) to other situations.					
...is able to weigh the evidence of the defense in the Nuremberg trials and decide which arguments were most persuasive and which were least persuasive.					
...is able to support his values regarding current reform movements with evidence and reasoning.					

SOCIAL STUDIES - FOUR SOCIETIES
Specific Objectives to Achieve Goals

The extent to which the student;	Failure	Poor	Need Improvement	Satisfactory	Exceptional
...when given documents relating to western ideologies, is able to state what values are expressed or implied.					
...when given the values expressed by western ideologies and social science concepts, is able to ask analytical questions about the relationship between these values and the nature of European political, economic, and social systems.					
...knows that a belief in equality has been expressed throughout the history of western man.					
...knows how westerners have tried to implement equality in their political, economic, and social arrangements.					
...knows the definitions and justifications of nationalism formulated by modern western man.					
...knows the roots and nature of Communist totalitarianism as it is practiced in the Soviet Union.					
...knows the nature of Nazi totalitarianism and its consequences for human beings.					
...is able to state justification for major western values.					
...is able to clarify value positions about such issues as equality, nationalism, and democracy.					
...takes an active and positive part in class activities, follows directions and works productively as an individual and in small groups.					
...shows an open mind in class discussions and reaches conclusions about issues after investigation and debate.					
...demonstrates an understanding of the basic classroom procedures and values of: punctuality, class attendance and completion of homework including missed work.					

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101

SECOND QUARTER (1971-72) REPORT TO PARENTS AND GUARDIANS

One of the most difficult assignments that a high-school teacher faces is the evaluation of student performance. Serious drawbacks can be cited for almost every form that the evaluation process takes. (see Evaluating and Reporting Pupil Progress by John Rothney, National Education Association "What Research Says Series" 1968)

The latest to gain favor in a long list of evaluation schemes may be called the performance-objective method. A list of carefully selected objectives within a subject area is developed by the teacher. Desired changes in student behaviour with respect to his achieving the chosen objectives is then the measure of how well the student is "performing." Simple and foolproof-----or is it?

Anyone can teach a rat to run a maze, especially if you make him hungry enough (that's euphemistically termed motivation). The rat runs the maze because he has no other choice. The student, especially at the high-school level, should at least be given the opportunity to choose the kind of maze he wants to run.

In my science classes I do not dictate what the student must do or must learn. I attempt to present as much interesting material as possible, make myself available on an individual or small group basis as often as the need arises, and leave it up to the student to determine what he or she will learn. I insist, however, that if they do a job, that they do it well. The ability to judge their individual efforts on an objective basis is one of the primary responsibilities of my role as a teacher. It requires that I continually keep abreast of what is happening in my field, and represent that field as best as possible. In this way I can indicate the pupil's likelihood of success in continuing to work in that field.

In this report you will find a list of material that has been made available or presented to the students during this quarter. You will also find a list describing the work that the student has performed. This work originated either as a suggested assignment or thru self motivation, and my personal evaluation appears alongside that work where appropriate. If you have any questions please do not hesitate to contact me.

Student Name________________	Parent conference requested Y N
Class________________	Effort ability index 1 2 3 4 5
Subject/level________________	(Minimum - 1 Maximum - 5
Teacher________________	Final grade at end of course____
Class absences this report period_	Unit of credit earned__________

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101

CHEMISTRY DEPARTMENT

ACHIEVEMENT REPORT

Dear Parent:

The following is a list of the instructional objectives for the second quarter in chemistry:

1. The student will be able to explain in writing: a) "the law of charges" (Coulomb's Law), as well as devise a model using familiar objects to illustrate it; b) the nuclear atom using protons, neutrons, electrons, mass number, size of atom, and isotopes; c) the decomposition or transmutation of atomic nuclei by appropriate nuclear equations.
2. The student will be able to use the periodic chart to predict formulas of compounds and properties of elements, as well as identify elements when given data about their properties.
3. The student will be able to use the laws of definite composition, simple multiple proportions, and percentage composition to determine empirical formulas.
4. The student will be able to describe in writing Rutherford's and Millikan's experiments.
5. The student will be able to balance equations electrically (moles of electrons) and chemically (moles of atoms or ions).
6. The student will be able to use the relationship E = hu to convert energy to frequency.
7. The student will be able to write electron orbital configuration of atoms and ions and relate it to physical characteristics of that element or ion.
8. The student will be able to draw orbital and electron dot representations of molecules and predict covalent or ionic bonding; formulas, shapes, and polarity of molecules.
9. The student will become familiar with usage of chemicals and laboratory techniques in experiments illustrating or related to the above objectives for a minimum of two (2) modules per week.
10. The student will write lab reports forming a conclusion based on observed data followed by "wondering why" questions.

Your son/daughter has achieved the above objectives in my estimation as interpreted by the following grades:

Class Work __________ Quarter Grade __________
Laboratory Work __________

Comments:

Student Name ____________________
Class ________ Homeroom ________
Subject/level ____________________
Teacher ____________________
Class absences this report period ____

Parent conference requested YES NO
Effort ability index 1 2 3 4 5
(Minimum - 1 Maximum - 5)
Final grade at end of course ________
Unit of credit earned ________

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101

Mathematics Department
Achievement Report

INTERMEDIATE ALGEBRA - CONTINUOUS PROGRESS

Dear Parent:

The continuation of the complete development of the number systems is the theme of Intermediate Algebra. The extensions of the properties of the Real Number System studied in Algebra I and Geometry are extended into the Complex Number System as an important phase of the development.

Intermediate Algebra covers many diverse topics, seemingly unrelated, which aid toward the development noted above. These topics are finally brought together as the student proceeds into Advanced Math I.

In the Continuous Progress Program (Individualized Study, students are allowed to progress through the work of the required ten units of Intermediate Algebra on a time-table established by and for themselves. Achievement grades for testing are required at an A or B level before proceeding to the next unit. Credit is given when a student completes the requirements of the course and the student may then proceed to the next sequential course.

Number of units completed at this time.____________

Student Name ____________________
Class __________ Homeroom __________
Subject/level ____________________
Teacher ____________________
Class absences this report period ______

Parent conference requested YES NO
Effort ability index 1 2 3 4 5
(Minimum - 1 Maximum -5)
Final grade at end of course ______
Unit of credit earned ______

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101

Mathematics Department
Achievement Report

INTERMEDIATE ALGEBRA - LEVEL 3

Dear Parent:

The objectives of the course in Intermediate Algebra are as follows:

I. To continue the study of the Real Number system introduced in Algebra I and to complete the development of the Complex Number system.
II. To study the fundamental processes and techniques of Algebra.
III. To acquire facility in the applications of these algebraic concepts and skills.

In order to evaluate your son's/daughter's performance the following items are considered.

1. Performance on Quizzes and Tests.
   This marking period your son/daughter achieved a grade of ______________ on tests.
2. Student's Role in Class.
   Your son/daughter:
   a. Plays a minor role in class activities and discussions.
      ____
   b. Participates in class activities and discussions.
      ____
   c. Plays a major role in all class activities and discussions.
      ____
3. Notebook - (Each student keeps a notebook which not only indicates the extent to which the student keeps up with the work but also the student's organizational ability which is important in a mathematics class.)

This marking period, your son/daughter achieved a grade of ______________ on the notebook.

Below you will find a number circled on the effort ability index. This number simply indicates the students effort in terms of his own ability.

Student Name ______________
Class ________ Homeroom ________
Subject/Level ______________
Teacher ______________
Class absences this report period ____

Parent conference requested YES NO
Effort ability index 1 2 3 4 5
(Minimum - 1 Maximum - 5)
Final grade at end of course ________
Unit of credit earned ________

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101

English Department
Achievement Report

Objectives of Developmental Reading 1971-72

Dear Parent:

This course is totally individual in nature. The student and I set goals which need to be worked on and he spends his class time accomplishing these. Much stress is put on individual initiative and a business like approach to the work.

The ✓ before the objective indicates this one as needing improvement when the student entered this course.

The * after the objective indicates the student accomplished the goal.

Those objectives with no ✓ or * are ones this student is not involved with.

By the end of one semester the student should be able to:

_____ demonstrate substantial increase in level of reading comprehension. _____

_____ have an extended general reading vocabulary taken from his readings. _____

_____ demonstrate by quantities and qualities of material read, an awakening recognition of the role of reading in his career, and an interest in reading itself. _____

_____ vary his reading speed to the difficulty of material read and the purpose for reading it. _____

_____ increase his reading speed about 100%. _____

_____ study and work efficiently and effectively for each content subject and task. _____

Student Name ____________
Class ________ Homeroom ________
Subject/level ____________
Teacher ____________
Class absences this report period _____

Parent conference requested YES NO
Effort ability index 1 2 3 4 5
(Minimum - 1 Maximum - 5)
Final grade at end of course _____
Unit of credit earned _____

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101

English Department
Achievement Report

Dear Parent:

Course Description:

Writing Workshop offers the student the opportunity to sharpen his writing skills by writing about experiences and events which arise from his own thoughts and activities.

GOALS:

________________ has completed ________________ writing assignments.

The student demonstrates the ability to:

1. focus on a specific idea, feeling, or event which he wants to express in writing. ________________
____
2. organize his material logically. ________________
____
3. use concrete details to make his writing clear. ________
____
4. write in different ways in order to be understood by different readers. ________________
____
5. recognize the strengths and weaknesses of his writing.
____
6. improve his papers by rewriting. ________________
____

Student Name ________________
Class ________ Homeroom ________
Subject/level ________________
Teacher ________________
Class absences this report period ____

Parent conference requested YES NO
Effort ability index 1 2 3 4 5
(Minimum - 1 Maximum -5)
Final grade at end of course ________
Unit of credit earned ________

Report Period 1 2 3 4

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont 05461
802-482-2101

DRIVER EDUCATION
ACHIEVEMENT REPORT

Dear Parent:

The goals of Driver Education are:

1. To develop a knowledge of the laws and rules of the road through classroom work.
2. To develop good driving attitudes.
3. To develop acceptable driving skills.

During the semester progress towards these goals has been:

Poor   Below Average   Average   Good   Excellent

Weaknesses have been discovered in the following checked areas:

_______ Attitude

_______ Steering control

_______ Speed control

_______ Hill starts

_______ Turns

_______ Backing

_______ Classroom work

_______ Interstate Driving

_______ City driving

_______ Adverse condition driving

_______ Parking

_______ Anticipation of hazards

_______ Reaction to conditions

Comments:

_______ Hours of additional driving practice at home are recommended before attempting to get a license.

Student Name _______________________
Class __________ Homeroom __________
Subject/level _______________________
Teacher _______________________
Class absences this report period _____

Parent conference requested YES NO
Effort ability index 1 2 3 4 5
(Minimum - 1 Maximum - 5)
Final grade at end of course _______
Unit of credit earned _______

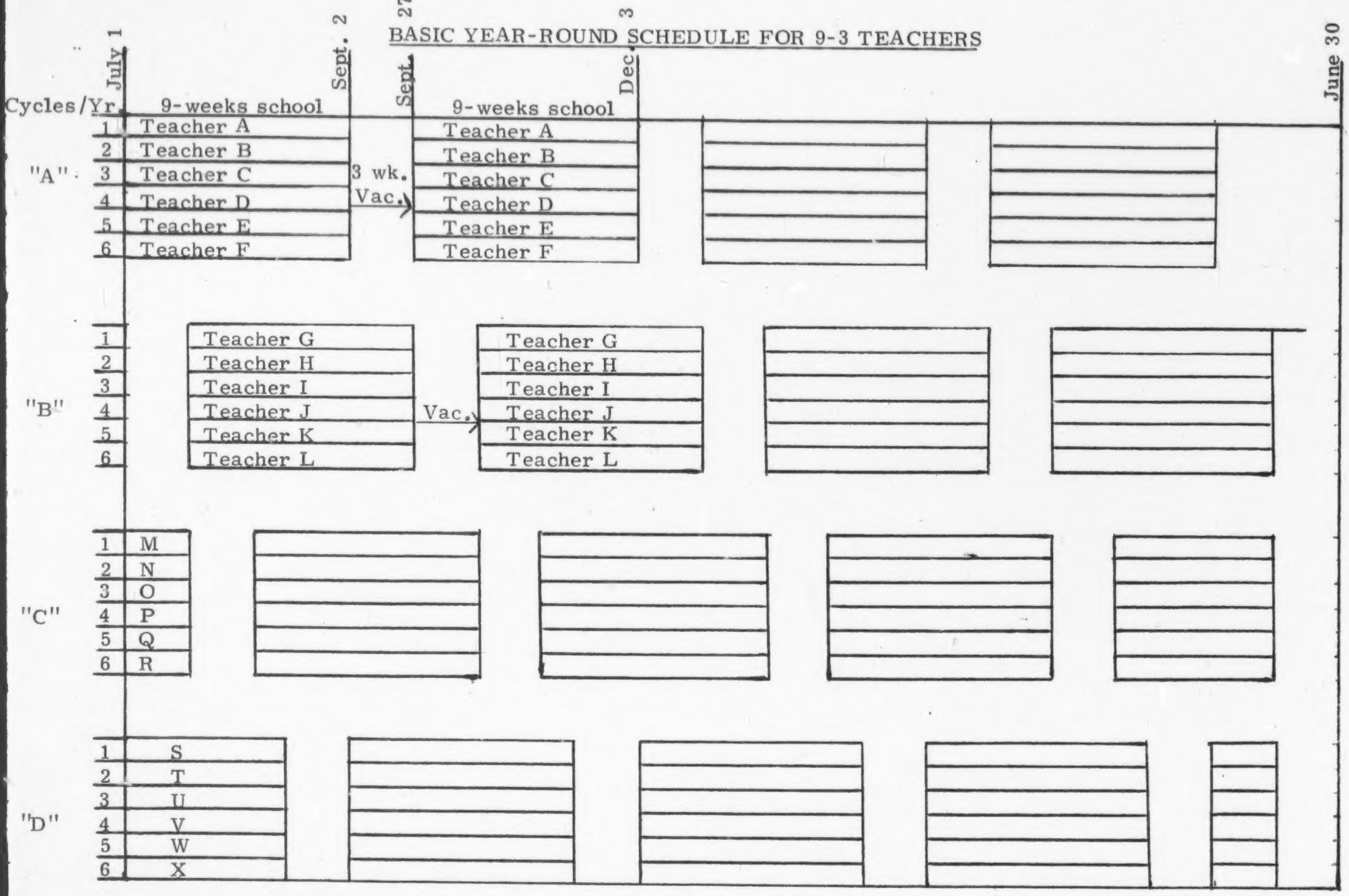
PART II

NUTS AND BOLTS
or
CONCEPT INTO PRACTICE

63ii

45 - 15 SCHEDULING

BASIC YEAR-ROUND SCHEDULE FOR 9-3 TEACHERS



(Work same schedule as group of students to which they are assigned)

Above schedule for teachers is in effect at Becky-David Primary and Central Elementary.
(Teachers work with only one cycle of students)

4th Year Room Assignments - 1971-72

Semi-Departmentalized-4th, 5th, 6th (only 2-3 week vacation one time during year)

	July	July	Aug.	Sept.	Sept.	Oct.	Nov.	Dec.	Dec.	Jan.	Feb.	Mar.	Mar.	April	May	May	June
Ending Days		22	12	2	23	13	3	3	22	18	10	3	22	19	9	26	26
eginning Days	1	26	16	7	27	18	9	7	Jan. 3	20	14	7	24	24	11	31	
1st Period	L.A.	Rm.1-Brown Rm.2-Railey		4^1 4^2	M-S	Rm.3-Trost Rm.6-Horn			SS-H	Rm.4-Pinney Rm.5-King			L.A.	Rm.1-Brown Rm.2-Railey			
2nd Period	M-S	Rm.3-Trost Rm.6-Horn		4^1 4^2	SS-H	Rm.4-Pinney Rm.5-King			L.A.	Rm.1-Brown Rm.2-Railey			M-S	Rm.3-Trost Rm.6-Horn			
3rd Period	SS-H	Rm.4-Pinney Rm.5-King		4^1 4^2	L.A.	Rm.1-Brown Rm.2-Railey			M-S	Rm.3-Trost Rm.6-Horn			SS-H	Rm.4-Pinney Rm.5-King			
1st Period		M-S	Rm.3-Trost Rm.6-Horn		4^1 4^2	SS-H	Rm.4-Pinney Rm.5-King			L.A.	Rm.2-Railey Rm.1-Brown			M-S	Rm.3-Trost Rm.6-Horn		
2nd Period		SS-H	Rm.4-Pinney Rm.5-King		4^1 4^2	L.A.	Rm.2-Railey Rm.1-Brown			M-S	Rm.3-Trost Rm.6-Horn			SS-H	Rm.4-Pinney Rm.5-King		
3rd Period		L.A.	Rm.2-Railey Rm.1-Brown		4^1 4^2	M-S	Rm.3-Trost Rm.6-Horn			SS-H	R.4-Pinney Rm.5-King			L.A.	Rm.2-Railey Rm.1-Brown		
1st Period M-S	6-Horn 3-Trost	4^1 4^2	L.A.	Rm.5-King Rm.4-Pinney			SS-H	Rm.1-Brown Rm.2-Railey			M-S	Rm.6-Horn Rm.3-Trost			L.A.	Rm.5 Rm.4	
2nd Period L.A.	5-King 4-Pinney	4^1 4^2	SS-H	Rm.1-Brown Rm.2-Railey			M-S	Rm.6-Horn Rm.3-Trost			L.A.	Rm.5-King Rm.4-Pinney			SS-H	Rm.1 Rm.2	
3rd Period SS-H	1-Brown 2-Railey	4^1 4^2	M-S	Rm.6-Horn Rm.3-Trost			L.A.	Rm.5-King Rm.4-Pinney			SS-H	Rm.1-Brown Rm.2-Railey			M-S	Rm.6 Rm.3	
1st Period L.A.	Rm.4-Pinney Rm.5-King		4^1 4^2	SS-H	Rm.1-Brown Rm.2-Railey			M-S	Rm.6-Horn Rm.3-Trost			L.A	Rm.4-Pinney Rm.5-King		SS-H	Rm.1 Rm.2	
2nd Period SS-H	Rm.1-Brown Rm.2-Railey		4^1 4^2	M-S	Rm.6-Horn Rm.3-Trost			L.A.	Rm.4-Pinney Rm.5-King			SS-H	Rm.1-Brown Rm.2-Railey		M-S	Rm.6 Rm.3	
3rd Period M-S	Rm.6-Horn Rm;3-Trost		4^1 4^2	L.A.	Rm.4-Pinney Rm.5-King			SS-H	Rm.1-Brown Rm.2-Railey			M-S	Rm.6-Horn Rm.3-Trost		L.A	Rm.4 Rm.5	

STUDENTS ARE ASSIGNED TO ONE OF FOUR GROUPS (A, B, C, D).

Dear Student and Parents:

I am writing to inform you of the group to which you have been assigned for the 1971-72 school year. Under the "45-15" plan, students are assigned to one of the four groups.

We are notifying you of the group assignment at this time for two reasons:

1) so that you will have a minimum of seven months advance notice in order to make plans for vacations and other activities.
2) so that you may have the opportunity to inform us of any special circumstances or situations that may necessitate a change of group assignment.

(Please contact me as soon as possible - by January 15, hopefully - regarding such a request.)

You will soon receive the booklet, Curriculum Offerings and Course Descriptions, 1971-72. Registration for courses will begin during January. More information on registration will be given to you early in January.

We need and solicit your support and cooperation in the implementation of this plan. Even as we are convinced of the educational soundness of the program, we will do all we can to reduce the impact of any personal inconvenience.

You have been assigned to Group A.

1971-72 Academic year (Group A):

1st quarter:
July 26 - September 24
(School closed: Labor Day, September 6)

2nd quarter:
October 18 - December 23
(School closed: VEA Convention, October 21, 22
Thanksgiving, November 25, 26)

3rd quarter:
January 24 - March 24
(School closed: Lincoln's Birthday, February 11
Town Meeting Day, March 7)

4th quarter:
April 17 - June 15
(School closed: Memorial Day, May 29)

1972-73 Academic year begins July 31.

ESTABLISHING THE COURSE CATALOG

Course offerings and methods of presentation are initiated at the department level. This is the first step in determining the course catalog.

To: All Departments
Re: '72-'73 Curriculum

CVUHS
12/1/71

For all courses to be offered in '72-'73 school year:

a) Course title ______________________________
b) Length of course, if applicable (3-week, 6-week, 9-week, 18-week, etc.)
or
Continuous progress type
or
Independent study type
or
Other non-time oriented type

____
____

c) Brief description of course for student booklet:

____
____
____
____
____
____
____

d) Credit offered for successful completion of course (1/4, 1/2, etc.): ________
e) Must the course be offered during a particular time of the year? ________, or anytime? ________ If at a particular time, when? ______________
f) How can this course be offered - check all that apply:
- _____ self-contained section
- _____ two-entries section
- _____ multiple (more than 2) entries section
- _____ not a group section, but on an individual basis (such as independent study and DUO)
- _____ special needs (ie, large and small groups)

g) Check one:
- _____ not sure at this time if flexibility of entries can be increased more than indicated above
- _____ do not want to increase flexibility of entries more than indicated above because of nature of course
- _____ believe that flexibility of entries can be increased with further planning/development work

h) To offer this course as indicated, the following planning/development/etc. work must be accomplished: (indicate needs specifically, including costs, suggested times, etc.)

____
____
____
____
____
____
____

JIO/vr

J. Olsen

CVUHS COURSE OFFERINGS

BUSINESS EDUCATION

Course	Length	Credit
General Business	4 quarters	1
Business Math	4 quarters	1
Recordkeeping	4 quarters	1
Distributive Education	4 quarters	1
Bookkeeping I	4 quarters	1
Bookkeeping II	4 quarters	1
Shorthand I	4 quarters	1
Shorthand II	4 quarters	1
Economic Education	4 quarters	1
Personal Typing	2 quarters	1/2
Notehand	2 quarters	1/2
Fundamentals of Data Processing	2 quarters	1/2
Business Communications and Media	2 quarters	1/2
Career English	2 quarters	1/2
Typing Skill Development	1 quarter	1/4
Payroll and Income Tax Preparation	1 quarter	1/4
Business Filing	1 quarter	1/4
Business Travel, Shipping and Mailing	1 quarter	1/4
Machine Transcription	1 quarter	1/4
How to Find and Apply for a Job	1 quarter	1/4
Marketplace U.S.A.	1 quarter	1/4
The Intelligent Consumer	1 quarter	1/4
Government and the Consumer	1 quarter	1/4
Law and the Consumer	1 quarter	1/4
Typing I	Continuous Progress	1
Typing II	Continuous Progress	1
Copying and Duplicating Machines	Continuous Progress	1/4
Calculators and Adders	Continuous Progress	1/4

FINE ARTS

Course	Length	Credit
Basic Art	4 quarters	1
Art Studio	Continuous progress	up to 1
Dry Crafts: Jewelry	Continuous progress	1/4
Dry Crafts: Leather	Continuous progress	1/4
Dry Crafts: Weaving	Continuous progress	1/4
American Indian Art	Continuous progress	up to 1
Ceramics: Pots for Beginners	Continuous progress	up to 1
Advanced Ceramics	Continuous progress	up to 1
Calligraphy	Continuous progress	up to 1
Oil Studio	Continuous progress	up to 1
Watercolor Studio	Continuous progress	up to 1
Wood: Design and Carving	Continuous progress	up to 1

FOREIGN LANGUAGES

Course	Length	Credit
Introduction to German	4 quarters	1
Introduction to Spanish	4 quarters	1
Intermediate Spanish	4 quarters	1
Advanced Spanish	4 quarters	1
Intermediate French	4 quarters	1
Chez Les Francais	4 quarters	1
Advanced French	4 quarters	1
History of the Language	2 quarters	1/2
Mythology	2 quarters	1/2
An Introduction to Vergil	2 quarters	1/2
Main Themes from the Aeneid	2 quarters	1/2
La Vida Hispanica	1 quarter	1/4
Hispanic Short Story	1 quarter	1/4
Advanced Conversation in Spanish	1 quarter	1/4
Hispanic Theatre	1 quarter	1/4
Modern French Novel	1 quarter	1/4
History of French Cinema	1 quarter	1/4
Advanced French Conversation	1 quarter	1/4
French Classical Theatre	1 quarter	1/4
French West Africa	1 quarter	1/4
Latin I	Continuous progress	1
Latin II	Continuous progress	1
Grammar (Spanish or French)	Independent study	1/4
Teacher Aide (Spanish or French)	Independent Study	1/4
Individualized Reading in Spanish	Independent Study	1/4
A Survey of French Civilization	Independent Study	1/4
French Structure Drills & Reading	Independent Study	1/4

HOMEMAKING ARTS

Course	Length	Credit
Consumer and Homemaking Education	4 quarters	1
Advanced Food Preparation	1 quarter	1/4
Foods From Around the World	1 quarter	1/4
Bachelor Cooking	1 quarter	1/4
Let's Give A Party	1 quarter	1/4
Dollar Sense for Teens	1 quarter	1/4
Modern Housekeeping	1 quarter	1/4
Interior Design and Home Decorating	1 quarter	1/4
Learning About Children	1 quarter	1/4
The How's and Why's of Teens	1 quarter	1/4
Clothing Management for Young Men	1 quarter	1/4
Creative Crafts	1 quarter	1/4
Leather, Suede, & Artificial Fur Sportswear	1 quarter	1/4
Individualized Clothing Construction	Continuous progress	up to 1

INDUSTRIAL ARTS

Course	Length	Credit
The World of Construction	4 quarters	3
Drafting II	4 quarters	1
Drafting I	2 quarters	1/2
Electricity	2 quarters	1/2
Appliance Repair	2 quarters	1/2
Basic Metals	2 quarters	1/2
Plastics	2 quarters	1/2
Wood Frame Construction	2 quarters	1/2
Architectural Drawing I	2 quarters (followed by independent study)	1
Power Mechanics	2 quarters 1 quarter	1/2 1/4
Advanced Metals	1 to 4 quarters	1/4 per quarter
Engineering Drawing I	Continuous progress	Up to 1
Advanced Woods	Continuous progress	Up to 1
Woodworking III	Continuous progress	Up to 1
Basic Woods	Continuous progress	Up to 1
Engineering Drawing II	Independent Study	1
Electronics I	Independent Study	Up to 1
General Metals III	Independent Study	Up to 1
Radio and TV Theory and Servicing	Independent Study	3/4
Residential, Commercial, and Industrial Wiring	Independent Study	Up to 3/4
Electrical Blueprint and Specification Design and Development	Independent Study	1/4
Applications of Digital Logic	Independent Study	1/4
Projects in Electricity and Electronics	Independent Study	1/4
Amateur Radio Novice License	Independent Study	1/4
General Class Amateur License	Independent Study	1/4
Instrumentation	Independent Study	1/8

Introduction to C.V.U. No Credit

This is not a course, as such, but a series of meetings with Freshman and other new students. The purpose is to familiarize students with the philosophy, program, operation, and other pertinent information about The Champlain Valley Union High School. These meetings will be held throughout the year, but particularly in the early part of the school year. (Students should not register for this course.)

LANGUAGE ARTS: WRITING

Course	Length	Credit
Creative Writing	2 quarters	1/2
Expository Writing	2 quarters	1/2
Journalism	2 quarters	1/2
Career English	2 quarters	1/2
Writing Workshop	1 quarter	1/4
The Research Paper	1 quarter	1/4
Creative Writing: Poetry	1 quarter	1/4
Grammar: A Review	1 quarter	1/4
Advanced Writing Workshop	1 quarter	1/4

LANGUAGE ARTS: OTHER

Speech	2 quarters	1/2
Basic Communication Workshop	2 quarters	1/2
Communication Training Group	2 quarters	1/2
Film Appreciation	2 quarters	1/2
Individualized Study	2 quarters	1/2
T.V. and the Viewer	2 quarters	1/2
Theatre Arts	2 quarters	1/2
Language and Human Behavior	1 quarter	1/4
Sight and Sound - The 70's	1 quarter	1/4
Film - An Introduction	1 quarter	1/4
Developmental Reading	1 quarter	1/4

MATHEMATICS

Course	Length	Credit
General Math II	4 quarters	1
Business Math	4 quarters	1
Applied Mathematics	4 quarters	1
Elementary Algebra - Part I	4 quarters	1
Elementary Algebra - Part II	4 quarters	1
Algebra I - Levels 1 & 2	4 quarters	1
Geometry - Level 1 & 2	4 quarters	1
Intermediate Algebra - Level 1 & 2	4 quarters	1
Advanced Math I	4 quarters	1
Advanced Algebra & Trigonometry	4 quarters	1
General Math I	Length as needed	Up to 1
Review Math	Length as needed	Up to 1
Algebra I- Level 1	Continuous progress	1
Geometry - Level 1	Continuous progress	1
Intermediate Algebra - Level 1	Continuous progress	1
Advanced Math I	Continuous progress	1
Advanced Math II	Independent study	1
Mathematics Seminar I	Independent study	1/2
Mathematics Seminar II	Independent study	1/2
Math Student Assistantship Program	Individual basis	1/4 to 1

MUSIC

Course	Length	Credit
Creative Music	2 quarters	1/2
(followed by)	Independent Study	up to 1/2
Music in the Baroque	1 quarter	1/4
"Rock"	1 quarter	1/4
Electronic Music and Musique Concrete	1 quarter	1/4
Making the American Music Scene	1 quarter	1/4
Freshman Chorus	Continuous progress	1/2
Select Choir	Continuous progress	1/2
Band	Continuous progress	1/2
Intermediate and Advanced Recorder Playing	Continuous progress	1/2
Folk/Rock Workshop	Continuous progress	up to 1/2
Ensemble Groups		up to 1/2
Instrumental and Vocal Instruction	Independent study	no credit

PHYSICAL EDUCATION

Course	Length	Credit
Physical Education I (required)	4 quarters	1/2
Physical Education II (required)	4 quarters	1/2
Horseback Riding	2 quarters	1/4
Bowling	1 quarter	1/6
Cross Country Skiing	1 quarter (+ plus independent study)	1/6
Gymnastics	1 quarter	1/4
Baseball	6 weeks	1/6
Flag Football	6 weeks	1/6
Field Hockey	6 weeks	1/6
Lacrosse	6 weeks	1/6
Plastic Hockey	6 weeks	1/6
Power Volleyball	6 weeks	1/6
Soccer	6 weeks	1/6
Softball	6 weeks	1/6
Speedball	6 weeks	1/6
Archery	6 weeks	1/6
Badminton	6 weeks	1/6
Cross Country Running	6 weeks	1/6
Dry Land Skiing	6 weeks	1/6
Fencing	6 weeks	1/6
Golf	6 weeks	1/6
Handball and Table Tennis	6 weeks	1/6
Paddleball	6 weeks	1/6
Tennis	6 weeks	1/6
Track & Field	6 weeks	1/6
Weight Training & Conditioning	6 weeks	1/6
Wrestling	6 weeks	1.6
Biking	3 weeks	1/12
Canoeing	3 weeks	1/12
Sailing	3 weeks	1/12
Shuffleboard	3 weeks	1/12
Folk Dance	3 weeks	1/12
Modern Dance	3 weeks	1/12
Hiking	3 weeks	1/12
Student Assistant in Physical Education	Independent study	up to 1/2
Horse Shoes	Independent study	1/12
Snow Shoeing	Independent study	1/12
Swimming	Independent study	1/6

SCIENCE

Course	Length	Credit
Investigations in Science		
Investigations in Science I	2 quarters	1/2
Investigations in Science II	2 quarters	1/2
Earth Science		
Rocks and Minerals	1 quarter	1/4
Land Forms and Map Interpretation	1 quarter	1/4
Geology of Vermont	1 quarter	1/4
Historical Geology	1 quarter	1/4
Oceanography	1 quarter	1/4
Weathering and Erosion	1 quarter	1/4
Meteorology	1 quarter	1/4
Astronomy I	1 quarter	1/4
Astronomy II	1 quarter	1/4
Climatology	1 quarter	1/4
Biology		
Survival of the Fittest	1 quarter	1/4
Lake Study	1 quarter	1/4
Embryology and Reproduction	1 quarter	1/4
Plant Life	1 quarter	1/4
The Functioning Animal	1 quarter	1/4
Bacteriology and Protists	1 quarter	1/4
Cell Physiology	1 quarter	1/4
Marine Biology	1 quarter	1/4
Prevention and Care of Athletic Injuries	1 quarter	1/4
Eco-politics	1 quarter	1/4
Overpopulation?	1 quarter	1/4
Chemistry		
Chemistry I	2 quarters	1/2
Basic Chemistry	1 quarter	1/4
Solution Chemistry	1 quarter	1/4
Chemistry in Action	1 quarter	1/4
Chemistry of Life I	1 quarter	1/4
Chemistry of Life II	1 quarter	1/4
Crystal Structure	1 quarter	1/4
Independent Study - Research in Science	Independent Study	flexible

SCIENCE
(cont.)

Course	Length	Credit
Physics		
Systems Analysis	2 quarters	1/2
Classical Physics	2 quarters	1/2
Modern Physics	2 quarters	1/2
Introduction to Physical Science	1 quarter	1/4
Applied Physics-Information Systems	1 quarter	1/4
Applied Physics-Electrical Systems	1 quarter	1/4
Applied Physics-Transportation Systems	1 quarter	1/4
Applied Physics-Environmental Systems	1 quarter	1/4
Introduction to Computers and Computer Programming	1 quarter	1/4
Advanced Computer Programming	1 quarter	1/4
Laboratory Science	1 quarter	1/4

2

SOCIAL STUDIES

Course	Length	Credit
Social Studies I		
Comparative Economic Systems	2 quarters	1/2
Comparative Political Systems	2 quarters	1/2
Decision Making	2 quarters	1/2
Historiography	1 quarter	1/4
Champlain State	1 quarter	1/4
Beginning Research in the Social Studies	1 quarter	1/4
Model City	1 quarter	1/4
Our Troubled World	1 quarter	1/4
You and the Law	1 quarter	1/4
Modern History	1 quarter	1/4
Social Studies II, III and IV		
The Shaping of Western Society	2 quarters	1/2
Race Relations in Two Societies	1 quarter	1/4
Current Powder Kegs	1 quarter	1/4
People of the Past through Film and Novel	1 quarter	1/4
Great Decisions	1 quarter	1/4
Geopolitics	1 quarter	1/4
American History		
American Historiography	1 quarter	1/4
Vital Decisions of the U.S. Supreme Court	1 quarter	1/4
U.S. Foreign Policy	1 quarter	1/4
The Depression and the New Deal	1 quarter	1/4
Individualized Readings in U.S. History	1 quarter	1/4
Cultural and Social Pluralism in America	1 quarter	1/4
American History I	1 quarter	1/4
American History II	1 quarter	1/4
American History III	1 quarter	1/4
American History IV	1 quarter	1/4
The American Frontier	1 quarter	1/4
Paleface and Injun--Myth and Reality	1 quarter	1/4
American History A-Colonial and Revolutionary Times	1 quarter	1/4
American History B-The Civil War	1 quarter	1/4
American History C-World Wars I & II	1 quarter	1/4
American History D-Modern Times	1 quarter	1/4

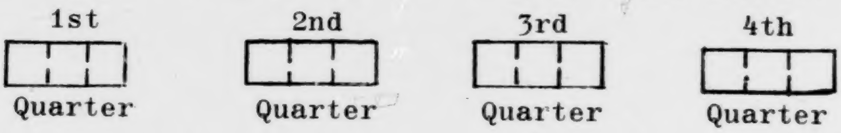
SOCIAL STUDIES
(cont.)

Course	Length	Credit
Exploring the Social Sciences		
Philosophy	2 quarters	1/2
Social Change	1 quarter	1/4
Social Science Research and Bibliography	1 quarter	1/4
Eco-politics	1 quarter	1/4
Who Am I?: The Search for Identity	1 quarter	1/4
Readings in Behavioral Science	1 quarter	1/4
Social Interaction	1 quarter	1/4
Rights in Conflict	1 quarter	1/4
Values in Conflict	1 quarter	1/4
Environment I: Its Use and Misuse	1 quarter	1/4
Environment II: Its Use and Misuse	1 quarter	1/4
Overpopulation?	1 quarter	1/4
The Effect of Sports Heroes on American Youth	1 quarter	1/4
The Role of Women in Society	1 quarter	1/4
Understanding Local Government	1 quarter	1/4
Humanities	1 quarter	1/4
Managing a Vermont Farm	1 quarter	1/4
Contemporary Issues	1 quarter	1/4

VOCATIONAL - TECHNICAL EDUCATION

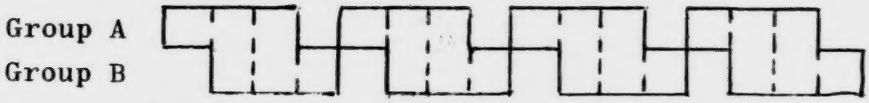
Course	Length	Credit
Agricultural Production	4 quarters (1st year)	3
	4 quarters (2nd year)	3
Building Trades I & II	4 quarters (1st year)	3
	4 quarters (2nd year)	3
Conservation, Forestry, & Outdoor Recreation	4 quarters (1st year)	3
	4 quarters (2nd year)	3
Culinary Occupations I & II	4 quarters (1st year)	3
	4 quarters (2nd year)	3
Machine Technology I & II	4 quarters (1st year)	3
	4 quarters (2nd year)	3
Printing Technology I & II	4 quarters (1st year)	3
	4 quarters (2nd year)	3
Auto Mechanics I & II	4 quarters (1st year)	3
	4 quarters (2nd year)	2½
Auto Body Repair I & II	4 quarters (1st year)	3
	4 quarters (2nd year)	2
Dental Assistant	4 quarters (1st year)	2
	4 quarters (2nd year)	2
Electrical Occupations	4 quarters (1st year)	2
	4 quarters (2nd year)	2
Electronics Technology I & II	4 quarters (1st year)	2
	4 quarters (2nd year)	2
Graphic Communications I & II	4 quarters (1st year)	2
	4 quarters (2nd year)	2
Radio and Television Repair I & II	4 quarters (1st year)	2
	4 quarters (2nd year)	2
Distribution & Marketing	4 quarters (1st year)	1
	4 quarters (2nd year)	1
Service Station Mechanics	4 quarters	3
Appliance Repair	4 quarters	2
Architectural Drafting	4 quarters	2
Basic Residential Wiring	4 quarters	2
Child Care Aide	4 quarters	2
Child Care Assistant	4 quarters	2
Clothing Specialist	4 quarters	2
Health Occupations I	4 quarters	2
Maintenance Mechanics	4 quarters	2
Medical-Dental Office Secretarial	4 quarters	2
Health Occupations II	4 quarters	1
Hospitality Service Aide	4 quarters	1

1. Courses may be offered in the following ways:
   a) With sufficient enrollment for a section within a group, the course may be offered in a traditional manner:



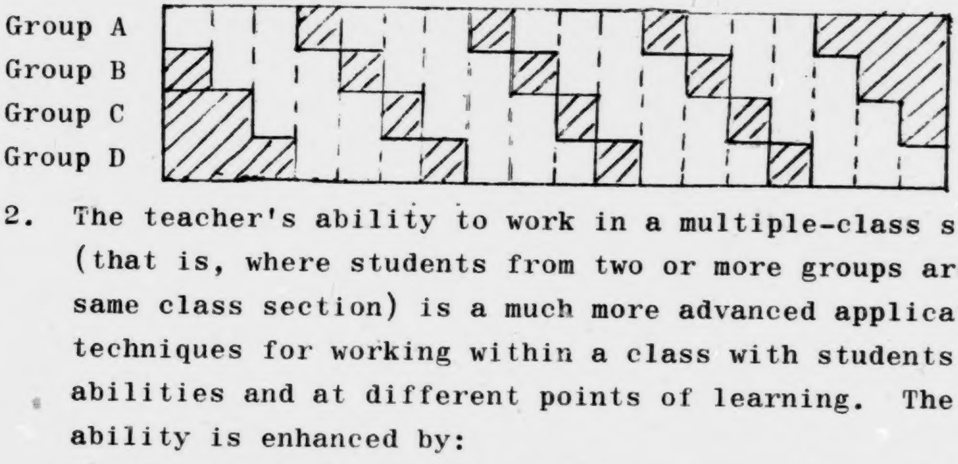
   (Note: Each unit represents a 3-week period; 3 units are one quarter.)

   b) With sufficient enrollment for a section only by combining students from two groups, the course may be offered as follows:



   Instructional techniques will vary depending on the objectives of the course (skill development, unit concepts, etc., and combinations of these).

   c) With sufficient enrollment for a section only by combining students from all four groups, the course may be offered as follows:



2. The teacher's ability to work in a multiple-class situation (that is, where students from two or more groups are in the same class section) is a much more advanced application of techniques for working within a class with students of different abilities and at different points of learning. The teacher's ability is enhanced by:
   a) Program developments in terms of behavioral objectives and performance criteria.
   b) Increased and more sophisticated utilization of learning materials.
   c) Additional equipment and materials which promote multiple-class instruction. (For example, a multi-channel cassette console providing wireless instruction to students at different points of learning will be essential in some areas.)

d) Utilization of teacher aides in some class situations.

e) Not least, the fact of an excellent faculty, knowledgeable in their subject fields, competent in teaching skills, alert to new developments, and keenly interested in their students' learning.

Rba

SCHEDULING PROCESS

SCHEDULING

A. Master Scheduling Techniques For 45-15

1. We chose the Westinghouse Learning Corporation at 235 Wyman Street, Waltham, Mass. 02154 to give us our computer runs because the director, Eugene M. Hayes, assured us that he saw no difficulty in maintaining the integrity of the master schedule. It is essentially a house plan which he can address himself to. (For scheduling purposes, the term "house" has been used in place of "group".)

2. Our pupil course requests were returned to us by house so that we had four separate conflict matrices.

3. We identified our singletons, doubletons, tripletons and multiple sections and constructed our 16-module matrix for the daily schedule.

4. At this juncture, a system must make a choice about the degree of sophistication it will incorporate in course offerings. The simplest method is to offer an equal number of sections of a course in each house. In essence this is four master schedules. Smaller schools may not have that option because teacher cost could become prohibitive. We settled on the following:
    - a. A-B-C-D (continuous progress)
    - b. A (house A)
    - c. A-B (house A and B)
    - d. B (house B)

   e. B-C (house B and C)
   f. C (house C)
   g. C-D (house C and D)
   h. D (house D)
   i. One could also use the houses in multiples of three, B-C-D, for example, if house enrollment warranted it.
   j. Combining courses (FR IV-V)

5. Resolving the conflict matrices was a long task. It worked best when five people were involved in the operation. We stationed a person with one of the four matrices at a wall, while a person recorded the results on a form at which time conflicts were resolved and the module and house for a particular course or section were arrived at. This information was placed on a blackboard and a duplicate made for safekeeping. At this time we tried to color code the length of courses, but it would have been to our advantage to adopt earlier the WLC code of numbers 01 to 7. (1-1st semester, 2-2nd semester, 3-year round, 4-1st quarter, 5-2nd quarter, etc.).

6. We found it difficult to visualize "45-15" as an entity and so we developed forms to keep us graphically abreast of what we were doing. The exhibits in our brochure illustrate this.

7. The remainder of the scheduling was the same as an ordinary one. It is a question of assigning sections to rooms. Added room availability became readily apparent and it was relatively easy task to complete

this. We could have been more efficient by assigning 4 groups to 3 rooms and cycling them so that we could have had 100 per cent occupancy at all time, had the need arisen. We estimate it took 600 man hours to fabricate the master schedule.

CVUHS COURSE ENROLLMENTS FOR 1971-72 4/26/71

Course # & Title	Wks	Registration A	 B	 C	 D	Total	Sections Scheduled
011 Wrtg Wrkshp L1-2	9	62	60	87	90	299	
012 Wrtg Wrkshp L3-4	9	41	34	40	50	165	
013 Speech L1-2	18	12	9	8	15	44	A-B, C-D
014 Speech L3-4	18	3	1	5	7	16	A-B-C-D
015 Myth Lit L1-2	9	15	12	22	24	73	A-B, C, D
016 Man In Cflt L3-4	9	8	9	8	8	33	A-B, C-D
017 Indiv Read L3-4	9	33	33	34	37	137	
018 Ptry & Lan L1-2	18	5	5	7	4	21	C only
019 Snds of Sev L3-4	18	24	14	22	20	80	
020 Ldmk Eng Nv L1-2	18	6	7	10	13	36	A-B, C-D
021 Myth Dif Cu L3-4	9	6	3	6	7	22	A-B-C-D
022 Comm Wrkshp L3-4	18	4	7	6	10	27	A-B-C-D
023 Bas Comm L3-4	18	4	5	4	3	16	A-B-C-D
024 Rsrch Paper L1-2	9	13	22	26	28	89	
025 The Drama L1-2	18	6	7	16	12	41	A-B, C, D
026 Shkp & En C L1-2	18	6	4	10	6	26	C-D only
027 Adol In Lit L1-2	18	19	18	33	34	104	
028 Film Intro L1-2	9	16	18	26	16	76	
029 Lit Into Fm L1-4	18	20	17	16	28	81	
030 Dev Read L1-4	9	40	35	40	28	143	
031 Ind Read L1-4	18	51	34	51	28	164	
032 Crtv Wrtg L1-3	18	20	18	24	19	81	
033 Port of Art L1	18	4	3	3	2	12	Drop
034 Pop Clt Std L3-4	18	8	5	10	4	27	A-B-C-D
035 Land Am Nvls L1	18	11	15	12	5	43	A-B, C-D
036 Shkp Trgdy L1	18	10	9	9	6	34	A-B, C-D
037 Shrt Story L3-4	18	14	14	20	12	60	A-B-C-D
038 Pop Novels L3-4	18	26	14	27	14	81	
039 Lives L1-3	18	9	10	5	3	27	A-B only
040 Exp Writ L1-2	18	7	15	9	5	36	A-B, C-D
041 Cont Read L1-2	18	5	7	4	5	21	A-B-C-D
042 Rel Lit L1-2	18	7	9	2	1	19	A-B-C-D
043 Inner Vis L1-2	18	18	11	10	7	46	A-B, C-D
044 Lg Vw SS L1-2	18	5	3	7	4	19	A-B, C-D
045 Car Eng L1-4	18	15	10	14	7	46	A-B, C-D
046 Sup Lit L2-3	18	23	21	25	13	82	
047 Ind Study	18	3	2	--	--	5	Drop
048 Shakespeare L2-3	18	4	2	3	1	10	Drop
049 Flm Appr L1-2	18	21	16	22	11	70	A-B, C-D
050 Comm Trng G L1-4	18	8	6	3	1	18	Drop
051 Mdn Am Nvls L1	18	9	7	7	8	31	A-B, C-D
052 Afro-Am Lit L1-3	18	8	9	11	7	35	A-B, C-D
053 Utopia L1-2	18	10	11	11	6	38	A-B, C-D
054 Ptry of Rel L1-2	18	15	7	5	--	27	A-B-C-D
055 Appr Teaching	9	5	6	4	1	16	Teacher schedules

4/26/71

CVUHS COURSE ENROLLMENTS FOR 1971-72

Course # & Title	Wks	Registration A	B	C	D	Total	Sections Scheduled
111 Political S L1-2	18	11	12	21	31	75	A-B, C, D
112 Economic Sy L1-2	18	12	13	23	31	79	A-B, C, D
113 Dec Making L3-4	18	9	10	9	5	33	A-B, C-D
114 Model Gov L3-4	18	15	18	19	18	70	
121 Western Soc L1-2	18	19	22	30	23	94	
122 Four Soc L1-2	18	17	21	29	24	91	
124 Great Dec L3-4	18	9	4	10	11	34	A-B, C-D
131 US Form Yrs L1	18	21	21	18	30	90	
132 US Form Yrs L2	18	22	24	26	24	96	
133 US Form Yrs L3	18	18	10	11	15	54	
134 US 20th Cen L1	18	22	21	17	29	89	
135 US 20th Cen L2	18	22	24	25	24	95	
136 US 20th Cen L3	18	18	10	11	14	53	
141 Mdrn History	36	11	12	18	--	41	
123 Geopolitics L3-4	18	3	--	3	4	10	Drop
142 Senior Seminar	18	2	1	1	1	5	Drop
143 Modern Problems	18	37	24	25	5	91	A, A, B, C-D
144 Intr Beh Sci	18	40	23	28	12	103	
145 Philosophy	18	16	11	12	--	39	A-B-C
211 Gen Math I	36	7	5	4	10	26	A-B-C-D (3 teachers)
212 Gen Math II	36	14	12	8	12	46	Combine with 211
213 Gen Math III	36	3	1	6	7	17	A-B-C-D
221 Alg I L1	36	2	5	7	7	21	A-B-C-D
222 Alg I L2	36	13	13	22	20	68	
223 Alg I L3	36	23	14	17	23	77	
231 Geometry L1	36	9	11	14	10	44	Combine with 221
232-33 Geom L2 Lg-Sem	36	19	21	31	24	95	(3 teachers)
234-35 Geom L3 Lg-Sem	36	18	4	17	17	56	Combine Lg with 232
241 Inter Alg L1	36	12	9	12	14	47	Combine with 221
242 Inter Alg L2	36	18	27	16	28	89	
243 Inter Alg L3	36	6	4	11	6	27	A-B, C-D
251 Adv Math I L1	36	17	16	11	5	49	Combine with 221
252 Adv Math I L2	36	14	9	16	--	39	A-B, C
253 Adv Math I L3	36	7	6	5	--	18	A, B-C
255 Adv Math II	36	2	1	1	--	4	A-B-C-D
261 Math Seminar I	18	2	4	1	--	7	A-B-C-D
262 Math Seminar II	18	1	4	1	--	6	A-B-C-D
271 Review Math	36	3	7	11	1	22	A-B-C-D
311 Earth Sci L1	36	8	13	25	24	70	
312 Earth Sci L2	36	17	11	17	15	60	Combine with 311
313 Earth Sci L3	36	18	15	14	19	66	Combine with 311
314 Invest In Sci L4	36	12	12	7	10	41	
321 Biology L1	36	12	11	21	10	54	
322 Biology L2	36	15	14	13	23	65	Combine with 321
323 Biology L3	36	15	10	17	23	65	Combine with 321
324 Biology L4	36	1	3	4	6	14	Combine with 314

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CVUHS

COURSE ENROLLMENTS FOR 1971-72

Course # & Title	Wks	Registration A	B	C	D	Total	Sections Scheduled
331 Chemistry L1	36	10	8	7	14	39	A-B, C-D
332 Chemistry L2	36	19	20	19	17	75	
333 Chemistry L3	36	10	6	8	7	31	A-B-C-D
341 Physics L1	36	7	5	6	--	18	
342 Physics L2	36	9	9	9	--	27	Combine with 341
343 Physics L3	36	8	5	5	--	18	A-B-C
344 Topics in Phy	36	--	--	1	--	1	Drop
411 French I	36	5	15	21	17	58	A-B, C, D
412 French II	36	12	20	13	20	65	
413 French II Sp	36	4	4	4	8	20	Combine with 412
414 French III	36	22	16	18	22	78	
415 French IV	36	14	15	10	8	47	A-B-C-D
416 French V	36	--	3	2	--	5	Combine with 415
421 Spanish I	36	19	16	30	23	88	
422 Spanish II	36	15	12	16	17	60	A-B, B-C, D
423 Spanish III	36	7	8	8	7	30	A-B-C-D
424 Spanish IV	36	4	3	1	1	9	Combine with 423
431 Latin I	36	3	6	2	7	18	A-B-C-D
432 Latin II	36	8	2	6	2	18	A-B-C-D
433 Latin III	36	4	3	--	4	11	A-B-C-D
434 Latin IV	36	--	2	2	--	4	Combine with 433
511 Gen Bus Ed	36	12	7	7	14	40	A-B, C-D
512 Bus Math	36	2	4	4	6	16	A-B-C-D
521 Typing I	36	8	11	13	22	54	A-B-C-D
522 Typing II	36	10	8	12	6	36	A-B-C-D
523 Personal Typing	18	37	49	47	42	175	
531 Notehand	18	6	4	8	8	26	A-B-C-D
532 Shorthand I	36	8	7	12	4	31	A-B-C-D
533-34 Shorthand II Sec Off Procd	36	7	3	2	--	12	A-B-C-D
535 Cler Off Procd	36	3	3	4	--	10	A-B-C
541 Econ Ed L1	36	10	8	7	1	26	A-B-C-D
542 Econ Ed L2	36	2	7	6	5	20	A-B-C-D
551 Recordkeeping	36	3	4	1	2	10	A-B-C-D
552 Bookkeeping I	36	14	7	13	6	40	A-B, C-D
553 Bookkeeping II	36	5	3	4	--	12	A-B-C
611 Fine Arts I	36	29	26	29	30	114	A-B-C-D
612 Fine Arts II	36	13	9	18	15	55	A-B-C-D
613 Fine Arts III	36	7	4	6	1	18	A-B-C-D
614 Fine Arts IV	36	2	2	3	--	7	Teacher schedules
621 Homemaking I	36	20	6	13	15	54	A, B-C, D
622 Child Care	18	5	4	6	8	23	A-B, C-D
623 Spec Home Econ	36	2	--	1	--	3	Combine with 621
624 Nutrition/Food	18	5	5	5	6	21	A-B-C-D
625 Adv Cloth Con	18	3	2	4	2	11	A-B-C-D
626 Flat Pattern Dn	18	3	--	2	4	9	A-B-C-D

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CVUHS

COURSE ENROLLMENTS FOR 1971-72

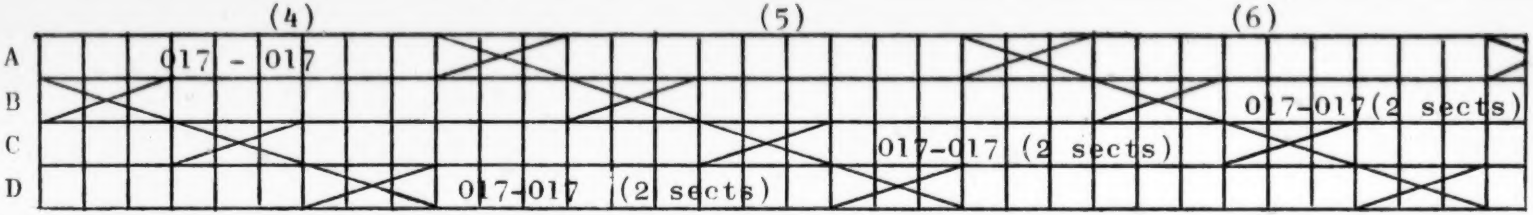
		Registration					
Course # & Title	Wks	A	B	C	D	Total	Sections Scheduled
627 Int Dsgn/Hsng	18	2	3	1	3	9	A-B-C-D
628 Home/Management	18	1	--	2	1	4	Drop
629 Tailoring	18	3	--	2	5	10	A-B-C-D
631 Woodworking I	18	24	25	26	23	98	A-B, C-D
632 Woodworking II	36	13	10	8	6	37	A-B-C-D
633-34 Woodworking III	36	3	--	3	1	7	Teacher schedules
641 Metals I	18	12	21	11	11	55	A, B, B-C, D
642 Metals II	36	4	3	9	10	26	A-B-C-D
643-44 Metals III	36	3	1	3	2	9	Teacher schedules
645 Power Mechanics	18	19	27	18	21	85	
651 Electricity	18	5	7	5	5	22	A-B, C-D
652 Res/Comm Wiring	18	4	3	7	8	22	A-B, C-D
653 Vac/Tube Elect	36	1	1	1	5	8	A-B-C-D
654 Transistor Elec	36	2	3	4	--	9	Combine with 653
661 Mech Drwg I	18	10	8	10	9	37	
662 Mech Drwg II	36	4	1	3	3	11	
663 Engr Drwg I	18	5	6	8	7	26	Combine with 661
664 Engr Drwg II	36	4	2	4	3	13	Combine with 662
665 Engr Drwg III	36	7	1	1	2	11	Combine with 662
671 Band	36	11	25	20	14	70	A-B-C-D
672 Chorus	36	13	7	12	12	44	A-B-C-D
673-74 Music I & II	36	6	3	4	2	15	A-B-C-D
711 Phy Ed (B) 9-10	36	52	53	59	69	233	
712 Phy Ed (B)11-12	36	37	34	35	30	136	
721 Phy Ed (G) 9-10	36	52	40	65	68	225	
722 Phy Ed (G) 11-12	36	48	30	46	23	147	
731 Driver Ed S1	18	52	52	60	56	220	
732 Driver Ed S2	18	18	6	13	19	56	
811 Vocatnl Ed I	36	10	13	9	7	39	(C-C-B-A)
812 Vocatnl Ed II	36	1	--	13	--	14	(C-C-B-A)
912 DUO	36	10	7	9	3	29	DUO committee schedules

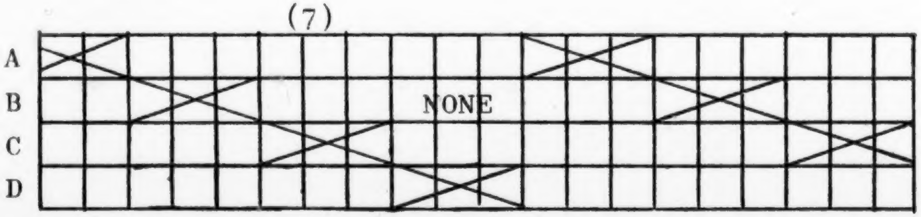
MODS	A-B-C-D	A	A-B	B	B-C	C	C-D	D
1 & 2	022-F 551 261 672 262 811 271 812 431 2 621	311 011-4 017-4 712 722 1 314	040 043 141 243 422	661-63 641 645F 011-5 012-6	242	411 321 114F	043	133-136 411 321 913 914
3 & 4	1 621 034 553 041 812 662 523F 211-212 255 624 1	2 314 028-2 038-F 412 144 1 332	036 052 049 2	143S 731 222 913 017-6 914		132-35 222 223	045 052	114 414 011-4 012-7
5 & 6	433-434 624 2 811 611 812 037S 533-534	2 332 029-F 222 414 030-4 133-136	049 2 015-S 016F 020-F 252 652 341	028S 321 046 711 114S 721 311 311	253 242	032-F 131-34 645 011-4	141 652	032 321 222 011 223 914 121-22
7 & 8	533-534 512 535 221-31-41-51 611 653-654	027-F 022-F 114S 132-35 131-34	423-434 511 631S	027F 712 024F 722 131-34 732 421	641-F 645-S	029 311 311 321	020S 631F 049 2	024F 028 038-S 030-4
9 & 10	432 532 613 522 673-674 811 812 621	223 011-6 721(ACD) 012-5	045F 051F 053S 111-112	019F 038-F 121-22 1 314	422	144F 111-112	049 2 051 143-S	046 012-7 412 030-4 1 314
11 & 12	621 531-S 532 664-65 811 712 812 523S,F 221-31-41-51	253 634 913 914 017-4	242	2 314 412 011-4 012-7		252 024 731 421	511	2 314 641 311 011-6 111-112
13 & 14	014 811 054 812 541 521 622 611 523F 523S	311 321 421 121-22	033 631-F 124 341 411 552 651	132-35 223 414 017-6		015 038 046 011-4	036 631S 027F 124 243 651	015 732 645F 311 131-34 019-4
15 & 16	023F 811 145S 612-13 213 521 542 415	024 641 242 645	013 631-S 025 035-F 113	029F 030-6 032S 144F 321	133-136	019 412 414	013 026 035-S	025 321 029 722 132-35 421

Appendix A

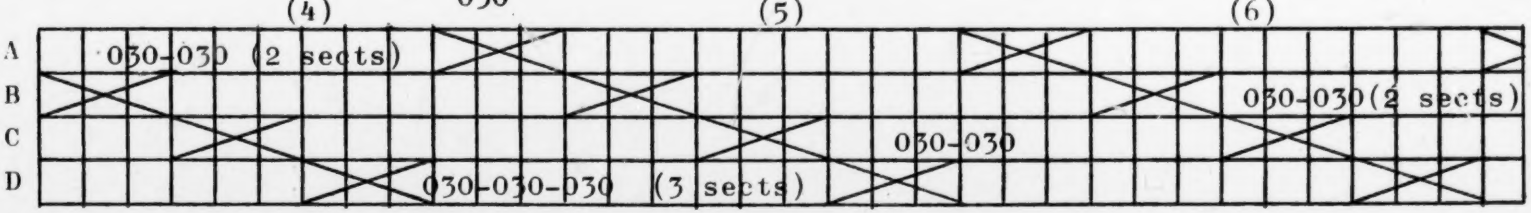
(Teacher 030) 9 Week Course (Flow Chart)

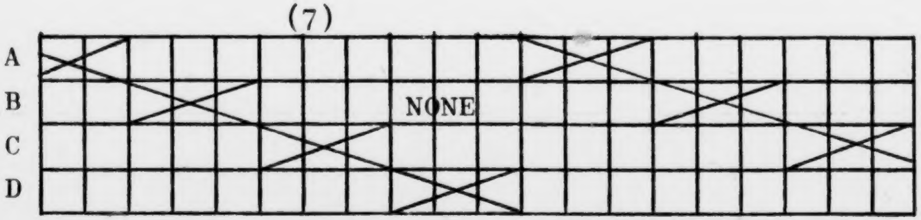
017





030





Teacher Load Factor = 2 3/4

Quarter for individualized Remedial and Developmental work.

(7th Quarter)

TEACHER SCHEDULE

(Teacher 030) (See Appendix A & B)

Mod.	Day 1		Day 2		Day 3		Day 4		Day 5	
1-2	224 017 A(4)	224 017 C(5)	017 A (4)	017 C(5)	017 A(4)	017 C(5)	017 A(4)	017 C(5)		
3-4	224 017 D(4)		017 D(4)		017 D(4)		017 D(4)			
	224 017 B(6)		017 B(6)		017 B(6)		017 B(6)			
5-6			224 030 A(4)	224 030 C(5)	030 A(4)	030 C(5)	030 A(4)	030 C(5)	030 A(4)	030 C(5)
7-8	224 030 D(4)		030 D(4)		030 D(4)		030 D(4)			
	224 030 B(6)		030 B(6)		030 B(6)		030 B(6)			
9-10	224 030A(4) 030D(4)	224 030 C(5)			030A(4) 030D(4)	030 C(5)	030A(4) 030D(4)	030 C(5)	030A(4) 030D(4)	030 C(5)
11-12	224 017 A(4)	224 017 C(5)	017 A(4)	017 C(5)		017 C(5)	017 A(4)	017 C(5)	017 A(4)	
13-14			224 017 D(4)		017 D(4)		017 D(4)		017 D(4)	
			224 017 B(6)		017 B(6)		017 B(6)		017 B(6)	
15-16	224 030 D(4)				030 D(4)		030 D(4)		030 D(4)	
	224 030 B(6)				030 B(6)		030 B(6)		030 B(6)	

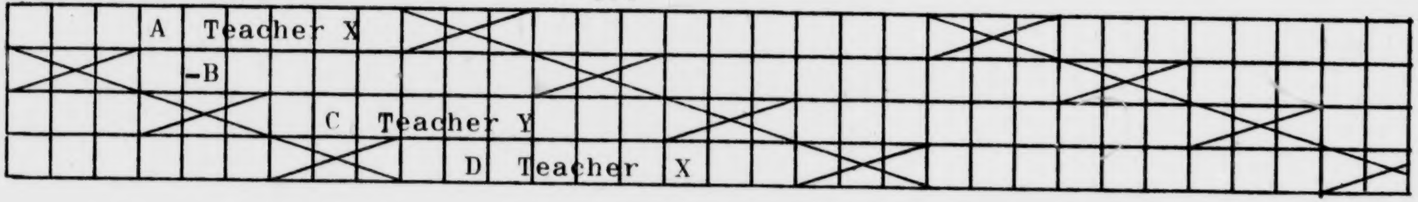
Appendix B

(Teacher 030)

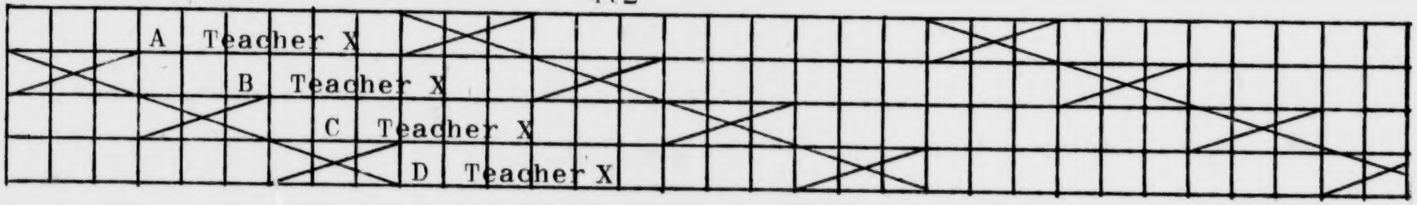
A House		D House		C House		B House	
Mod.	Course	Mod.	Course	Mod.	Course	Mod.	Course
1-2	017(4)	1-2	--	1-2	017(5)	1-2	--
3-4	--	3-4	017(4)	3-4	--	3-4	017(4)
5-6	030(4)	5-6	--	5-6	030(5)	5-6	--
7-8	--	7-8	030(4)	7-8	--	7-8	030(6)
9-10	030(4)	9-10	030(4)	9-10	030(5)	9-10	--
11-12	017(4)	11-12	--	11-12	017(5)	11-12	--
13-14	--	13-14	017(4)	13-14	--	13-14	--
15-16	--	15-16	030(4)	15-16	--	15-16	030(6)

COURSE FLOW CHART (Sequentially for each Dept.)

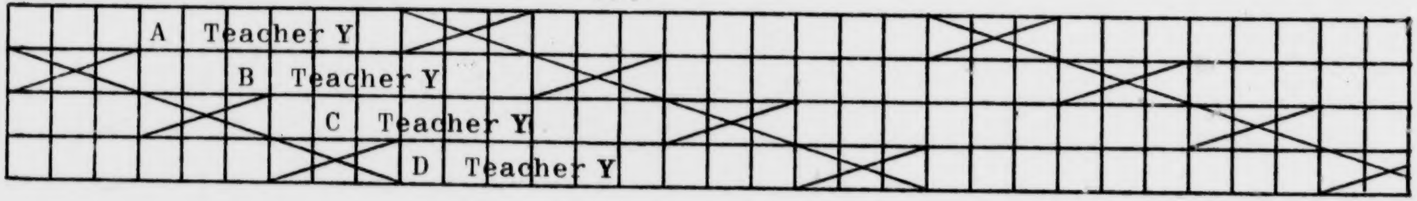
411



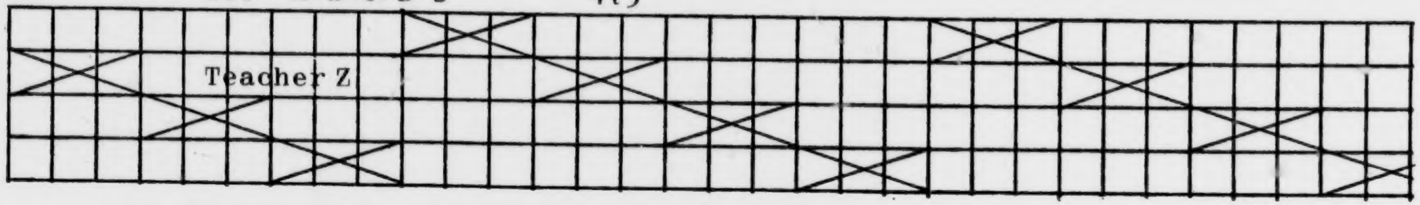
412



414



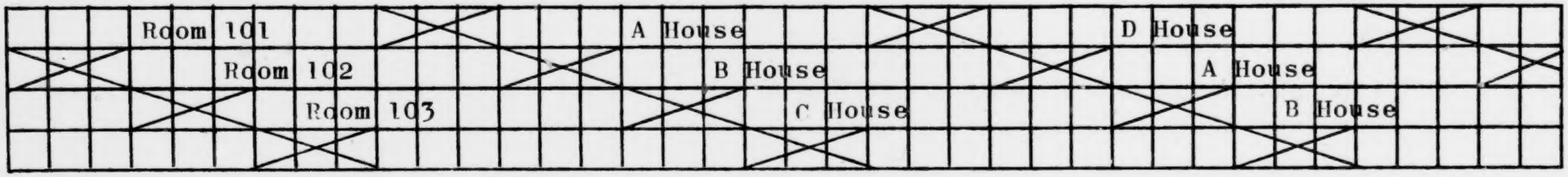
Two A-B-C-D's 415

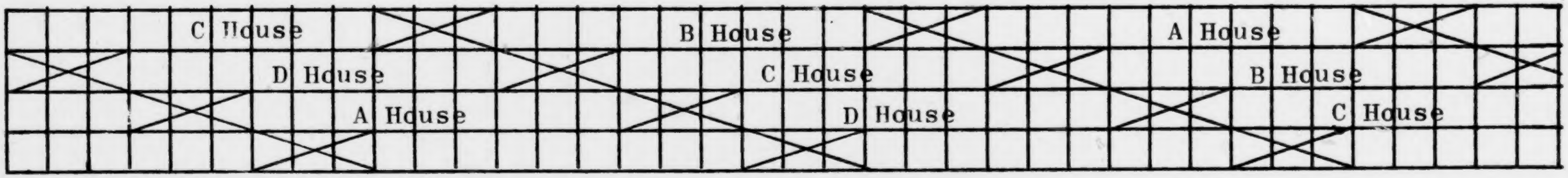


411 - 1 Section A-B, 1 C, 1 D
412 - 4 Sections, 1 in each house.
414 - Same as 412
415 - 2 Continuous Progress (FR IV&V combined)

ROOM UTILIZATION MODEL

Part I (Flow Chart)





4 Groups Assigned to 3 Rooms

(25% Fewer Pupils, 33% More Room)

ROOM UTILIZATION MODEL

Part II

House	Room	Course #	
A	101	233	
B	102	234	(ABC)
C	103	235	
D	101	236	
A	102	233	
B	103	234	
C	101	235	(BCD)
D	102	236	
A	103	233	
B	101	234	
C	102	235	(CDA)
D	103	236	
A	101	233	(DAB)
B	102	234	
C	103	235	
D	101	236	

CVUHS

TEACHER ASSIGNMENTS
BUSINESS EDUCATION DEPARTMENT

Instructor	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16
Robarge	Steno 2 218-220 (ABCD)	Sec.Off. Proc. 218-220 (ABCD)	(fall) Steno 1 220 (B)	(fall) Steno 1 220 (D) (sp.) Per. Typing222			Typing 1 222 (A)	Typing 2 222 (B)
errill	BKPG 1 224 (A+B)		Gen'l Bus 219 (C+D)		BKPG 1 218 (C+D)	Ec.Ed.1 219 (A+B)	BKPG 2 218 (ABCD)	
ones			(fall) Steno 1 220 (A) (sp) A+B	(fall) Steno 1 218 (C) (sp) C+D				
tzsimon	Notehand (fall) A+B	Typing 2 222 ABCD	Notehand 224 (spring) C+D	Pers.Typ 220 (B)	Cler Off Proc 220 (ABCD)	Typing 2 222 (ABCD)		(fall) Pers Typ. 220 (A)
urbank	(fall) Per.Typ. 220 (C)	Gen'l Bus 224 (A+B)	Typing 1 222 (C)		Typing 1 222 (D)	spring Per.Typ 220 (A)	fall Per. Typ 220 (C)	Bus Math 224 (ABCD)
rd	Econ Ed 1 219 (C+D)	Econ Ed2 219 (A+B)		Econ Ed 2 219 (C+D)		Bus Math 218 (ABCD)	Recordkp. 219 (ABCD)	

SELECTIONS: Fall 29
Spring 27

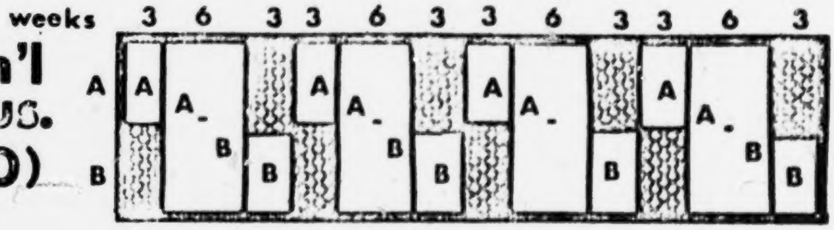
ROOM UTILIZATION

218	X	X	X	X	X	X	X	
219	X	X	X	X		X	X	X
220	X	X	X	X	X	X	X	X
222	X	X	X	X	X	X	X	X
224	X	X	X					
other	X							

CVUHS

Business Education Dept.
45-15 Scheduling for 1971-72

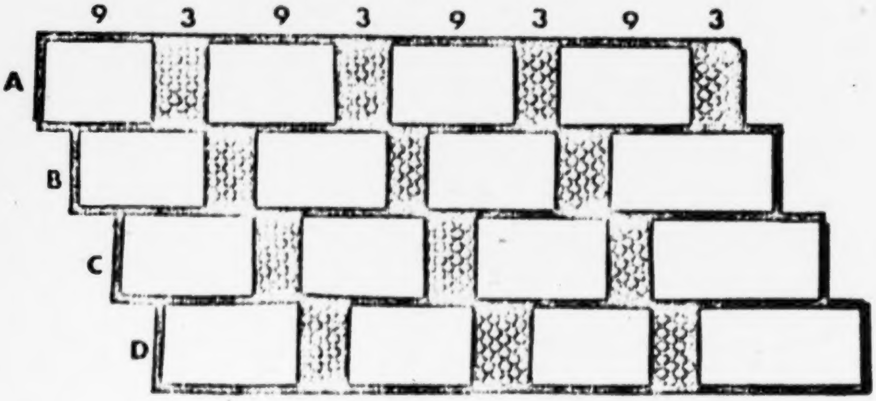
Gen'l Bus. (30)



C&D same as A&B

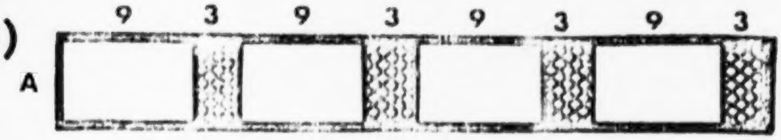
TWO SECTIONS

Bus. Math (45)



TWO SECTIONS (ABCD)

Typing 1 (75-80)

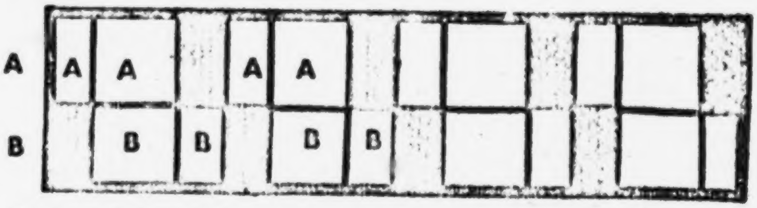


BCD same as Group A

FOUR SECTIONS

CVUHS

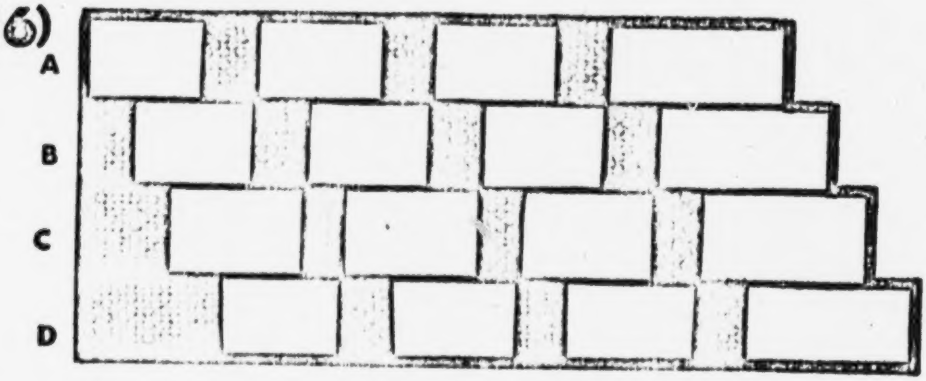
Bookkeeping I
(50)



C - D same as A - B

Bookkeeping II

(16)

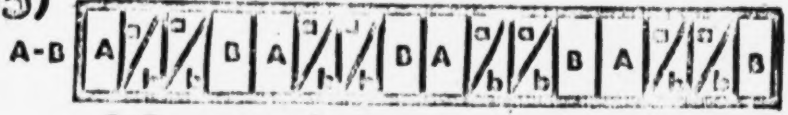


1 Section

Recordkeeping
(25)

Same as Bkpg.II 1 or 2 Sections

Steno I
(35)



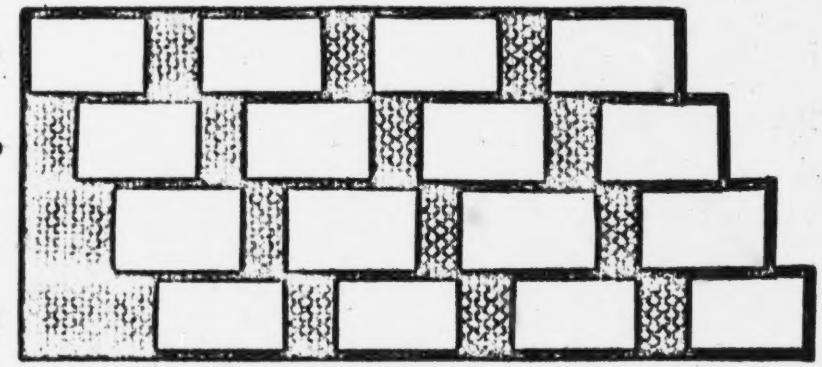
C - D same as A - B

1st sem. A 218 (5-6)
B 220 (5-6)
C 218 (7-8)
D 220 (7-8)

4 channel lab
in 218

2nd sem. ab,cd combine

Steno II **CVUHS**
16



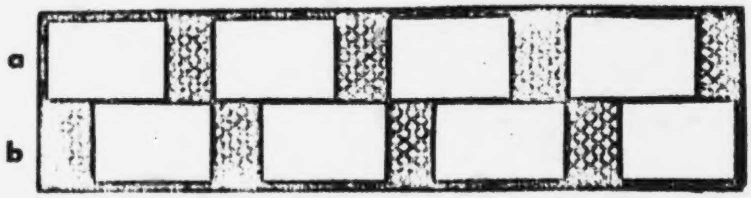
Sec. Procedures
16

Same as Steno II (indiv.)

Cler. Procedures
16

Same as Steno II

Econ. Ed. LI
30-35



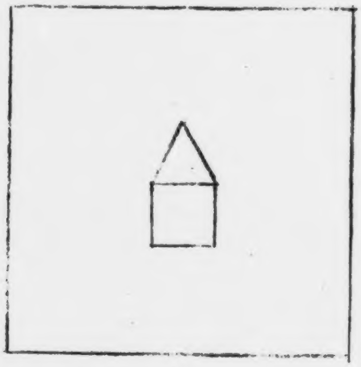
c,d same as a,b

Econ. Ed. LII
30-35

Same as Econ. Ed.

STUDENT TRANSPORTATION - HAYWARD

School district:
(Elementary)

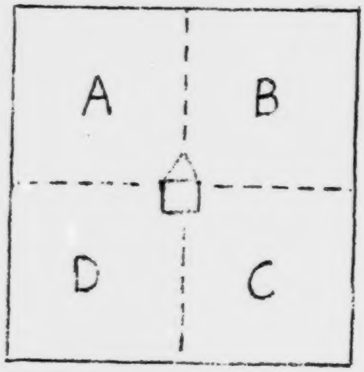


All students in same group

Transportation as with traditional school year

STUDENT TRANSPORTATION - VALLEY VIEW

School district:
(Elementary)

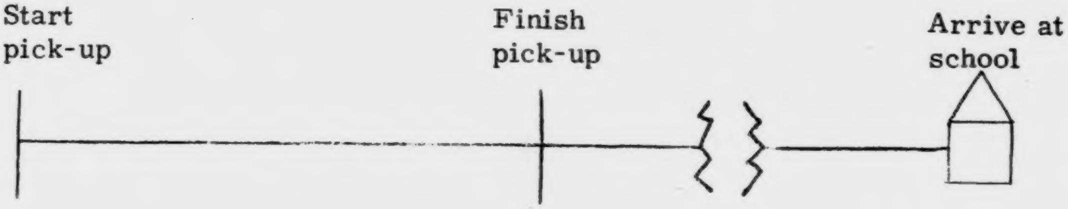


Students are grouped by neighborhood

STUDENT TRANSPORTATION - CVUHS

(Secondary)

Bus Route:



Number of students on a bus route = 4/3 of a busload

Example: If bus capacity is 60 students, then establish bus route of 80 students, with 20 students initially assigned to each of the four groups, A, B, C, D.

Grouping does not take into account:
- residence or neighborhood
- grade level
- courses elected
- sex
- friends
- alphabet (last names)

MULTIPLE ACCESS SCHEDULING

CALENDAR SELECTION

1) Each student must be involved in "directed learning experiences" for 175 days in each academic year, as at present.

   Note: "Directed learning experiences" means all courses offered at C.V.U., including DUO, independent study and the like.

   Note: The 1972-73 academic school year begins September 5, 1972 and ends August 10, 1973.

   Note: Do not confuse academic and fiscal school years. The fiscal year begins July 1 and ends June 30.

2) The structure of 9-week quarters, as at present, will be maintained.

3) Eleven quarters constitute the 1972-73 academic year. Normally, four quarters not overlapping will be elected for the academic year. Five quarters (not overlapping) may be elected.

4) The dates of the eleven quarters are:

   1. September 5 - November 8 **
   2. November 9 - January 19 **
   3. November 27 - February 2
   4. January 3 - February 16
   5. January 22 - March 23
   6. February 5 - April 6 **
   7. February 20 - April 20
   8. March 26 - June 1
   9. April 9 - June 15 **
   10. April 30 - June 29
   11. May 29 - August 10

   ** denote traditional school year quarters

   Independent study and Duo programs may occur within or between quarters.

Vacations Holidays & Faculty In-service Days (No Classes)

October 23
November 22 p.m., 23, 24
December 25 - January 2
February 19
February 20 - 23
April 20 p.m., 23 - 27
May 28
July 2 - 20

ESTABLISHING THE COURSE CATALOG

(Same as for 45-15)

(See Course Offerings)

CHAMPLAIN VALLEY UNION HIGH SCHOOL
Hinesburg, Vermont

NAME________________________ Sex_______ School Code C-2 Pupil No. _______
M or F
Yr. of Grad._________ Counselor_______ H____ Calendar

---

011 Adol in Lit
013 Adol in Lit
015 Myth. Lit.
017 Myth. Lit.
019 Ptry.&Lang.
021 Ptry & Lang.
023 Ldmk Eng. Nv
025 Ldmk Eng. Nv
027 Drama
029 Drama
031 Shkp & Eng. Com
033 Shkp & Eng. Com
035 No, But I Saw the Movie
037 No, But I Saw the Movie
039 Minorities U.S.A.
041 Minorities U.S.A.
043 From the Newsstand
045 Man in Conflict
047 This Land is Your Land
049 Myths of Diff. Cultures
051 Individualized Reading
012 Shkp & Eng. Com
014 Shkp & Eng. Com
016 Portrait of the Artist
018 Portrait of the Artist
020 Long View of Short Story
022 Long View of Short Story
024 Landmark American Novels
026 Landmark American Novels
028 Shakespearean Tragedy
030 Shakespearean Tragedy
032 Inner Vision
034 Inner Vision
036 Contemporary Readings
038 Contemporary Readings
040 The Lives of Others
042 The Lives of Others
044 Modern American Novels
046 Modern American Novels
048 Afro-American Lit.
050 Afro-American Lit.
052 Supernatural Lit.
054 Supernatural Lit.
056 Short Story
058 Short Story
060 Popular Paperback Novels
062 Popular Paperback Novels
064 Utopia
066 Utopia
068 Poetry of Relevance
069 Poetry of Relevance
070 From the Newsstand
071 Individualized Reading
072 Humanities
073 The Rel. Dim. of 20th Cen. Lit.

057 Speech
059 Speech
061 Speech
063 Speech
065 Basic Com. Workshop
067 Basic Com. Workshop
086 Com. Training Group
087 Com. Training Group
088 Film Appreciation
089 Film Appreciation
090 Individualized Study
091 Individualized Study
092 T.V. and the Viewer
093 T.V. and the Viewer
094 Theatre Arts
095 Theatre Arts
096 Lang. & Human Behavior
097 Sight & Sound - The 70's
098 Film - An Introduction
099 Developmental Reading

101 Com. Economic Systems
103 Com. Economic Systems
105 Com. Political Systems
107 Com. Political Systems
109 Decision Making
111 Decision Making
113 Historiography
115 Champlain State
117 Begin.Res. in Soc.Stud.
119 Model City
121 Our Troubled World
123 You and the Law
125 Modern History

130 The Shaping of West.Soc.
131 The Shaping of West.Soc.
127 Race Rel. in Two Soc.
129 Current Powder Kegs
132 Peop.Past Thru Film & Nv.
102 Great Decisions
104 Great Decisions
106 Geopolitics
108 Geopolitics

133 Amer. Historiography
134 Vit.Dec.of US Sup.Court
135 US Foreign Policy
136 Depress. & New Deal
137 Ind.Read. in US Hist.
138 Cul.& Soc.Plursm. in Amer.
139 American History
140 American History II
141 American History III
142 American History IV

151 Rights in Conflict
152 Values in Conflict
153 Environment I
154 Environment II
155 Overpopulation?
156 Eft.of Spts.Hero Amer.Yth.
157 Role of Wom. in Soc.
122 Undstding Local Gov.
124 Humanities
126 Managing a Vt. Farm
128 Contemporary Issues

201 Gen. Math I
203 Gen. Math I
205 Gen. Math I
207 Gen. Math I
202 Gen. Math II
204 Gen. Math II
206 Gen. Math II
208 Gen. Math II
209 Applied Math
211 Applied Math
213 Applied Math
215 Applied Math
210 Alg. I L1 Con.Prog.
212 Alg. I L1 Con.Prog.
214 Alg. I L1 Con. Prog.
216 Alg. I L1 Con.Prog.
217 Alg. I L1 Trad.
219 Alg. I L1 Trad.
221 Alg. I L1 Trad.
223 Alg. I L1 Trad.
218 Alg. I L2
220 Alg. I L2
222 Alg. I L2
224 Alg. I L2
225 Elem. Alg. Part I
227 Elem. Alg. Part I
229 Elem. Alg. Part I
231 Elem. Alg. Part I
226 Elem. Alg. Part II
228 Elem. Alg. Part II
230 Elem. Alg. Part II
232 Elem. Alg. Part II
233 Geom. L1 Con. Prog.
235 Geom. L1 Con. Prog.
237 Geom. L1 Con. Prog.
239 Geom. L1 Con. Prog.
234 Geom. L1 Trad.
236 Geom. L1 Trad.
238 Geom. L1 Trad.
240 Geom. L1 Trad.
241 Geom. L2 Lrg. Group
243 Geom. L2 Lrg. Group

SCHEDULING PROCESS

SCHEDULING MULTIPLE ACCESS

The multiple access design is a natural evolution of the 45-15 concept. As has been stated elsewhere, its distinct advantage over the former is its obvious flexibility. Using Form A, CVU/72, as an algorithm, we completed the master schedule without referring to wall charts or other elaborate processes. Two individuals created the master schedule in about 12 days and assigned courses to rooms in a day and a half. This was enhanced by our use of quarter and multiple entry courses discussed elsewhere.

The concept is effective as long as Form A is used jointly for course assignment and teacher assignment. It is simply a clerical procedure. Its distinct advantage over other more elaborate procedures is the intimate availability of course and teacher requirements before you at all times.

MULTIPLE ACCESS TO COURSES

The multiple access curriculum can't truly function unless it can have a bank of quarter courses surrounding it. At this time we see no other way in this system to create a flexible schedule on a year round basis.

In addition to the opportunities it creates for scheduling flexibility, the concept also addresses itself to the following:

1. Recognition of the short-term goal orientation of children in our society.

2. A quick re-entry into courses after illness or other absence school, without disruption of the instructional process.

3. A reduction of long term tensions between student and teacher when personality conflicts exist.

4. A capitalization of teacher expertise by assigning talent to given areas.

5. A recognition of the possibility to redeem short term failure instead of being victimized by one bad quarter in a year-long course.

6. An openness that allows students to elect from a wide range of offerings in a given discipline.

7. An adaptation to seasonal programs. For example:

   a. Physical Education: Waterfront, Sailing, Canoeing, Hiking, etc.
   b. Science: Lake Study, Marine Biology, Geology, etc.
   c. English: Shakespeare and other summer stock
   d. Social Studies: summer museums, international travel, etc.
   e. Industrial Afts: Building, Landscaping, Agriculture, Sugaring, etc.
   f. DUO programs tailored to seasonal specialties

8. An opportunity to increase the number of courses a student may take at any given time, either for early graduation or other calendar manipulations or options he desires.

9. An opening to create mini-courses momentarily whenever student density demands it, providing a teacher is available. By the same token, with proper evaluation, unsuccessful courses may be more quickly dropped, if they prove unsuccessful.

10. It gives recognition to the fact that the length of the school year could depend on the number of courses taken, rather than the length of time a student has to be there. Quarter courses enhance this.

11. Quarter courses do not increase cost. This is an important factor because many times the number of course offerings is equated with cost.

12. An insurance of better room utilization. It does not leave gaps too frequently between time slots.

Unless certain guidelines are observed, quarter courses and multiple-entry courses can have several disadvantages. They are:

1. Possibility of impersonalizing instruction by pivoting from one teacher to another frequently.

2. A crushing load of courses. Theoretically, a student could graduate in two years, if allowed to do so.

3. A thick and confusing curriculum offering booklet for students and parents, unless properly oriented.

4. Offering a student the opportunity to "specialize" too early.

We chose to implement the so-called "arena" or "tub" scheduling process. Briefly stated, this is a method that compares to college type registration. Students know course sections and meeting times and register according to some established priorities. The master schedule is based on pre-registration figures, and students must honor their original requests. Note Form B, CVU/72, which we used as a worksheet. We found that the students had little difficulty understanding the form and after a brief orientation, most students could read our fifteen page master schedule. If conflicts arose, the students were intimately involved in deciding what they wished to substitute for the conflict. We were able to honor most requests for changes unless they involved shared-time vocational students who were locked into a particular program by the area centers.

Note how we used adaptations of both Forms A and B (Forms A-1 and B-1) to report to the students and their parents the final resolutions of their schedules. Attached to the report was a list of our scheduled courses which they could use as reference in understanding their schedule for next year.

CVUHS

DEPT: English

Course 005 Writing Workshop

Mod. per Week 2x4

No. of Sections 9

Max. No. per Section 20

Room No.

Teacher

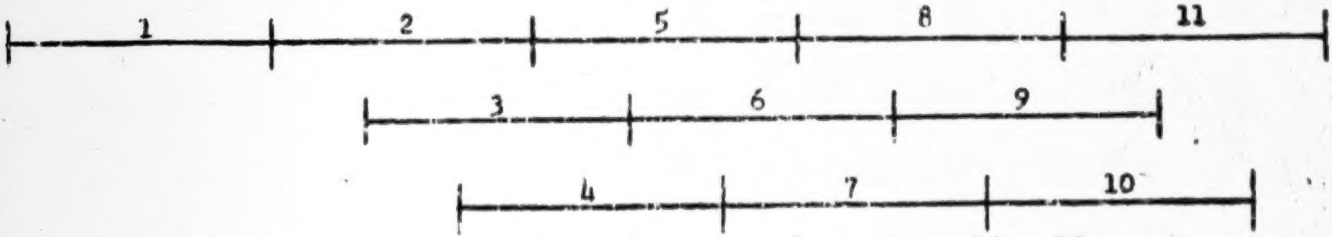
Student

Self Contained

X Multi-Entry

Con-Progress (N.S.)

Con-Progress (Sch)



Mod.		2	3	4	5	6	7	8	9	10	11		
1	-01 (105)												
2	Temp. 7												
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													

CVUHS

DEPT: ____________

Course ____________

Mod. per Week ____________

No. of Sections ____________

Max. No. per Section ____________

Room No. Temp 7

Teacher ____________

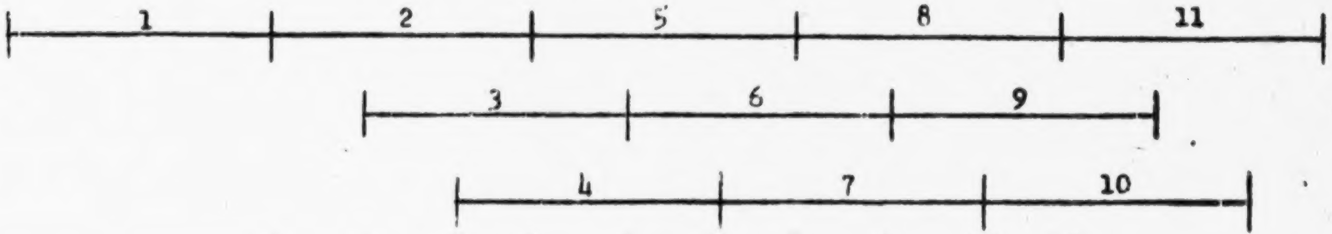
Student ____________

Self Contained

Multi-Entry

Con-Progress (N.S.)

Con-Progress (Sch)



Mod.		2	3	4	5	6	7	8	9	10	11		
1	005-01												
2	(105)												
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													

CVUHS

DEPT: Fnglish

Course__________________

Mod. per Week______________

No. of Sections____________

Max. No. per Section________

Room No.________

Teacher 105 Jones

Student__________

Self Contained

Multi-Entry

Con-Progress (N.S.)

Con-Progress (Sch)

1 2 5 8 11

3 6 9

4 7 10

od.		2	3	4	5	6	7	8	9	10	11		
1	005-01 Wrtg Wkshp												
2	Temp 7												
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													

Form A. CVU 72

CVUHS

DEPT: ____________

Course ____________

Mod. per Week ____________

No. of Sections ____________

Max. No. per Section ____________

Room No. ____________

Teacher ____________

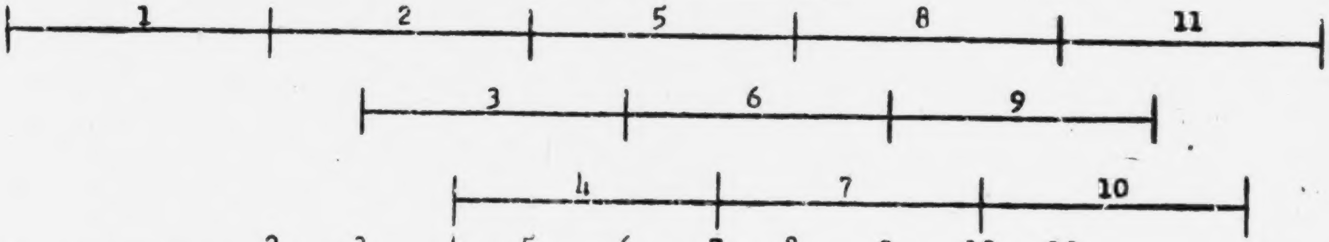
Student Smith, James

Self Contained

Multi-Entry

Con-Progress (N.S.)

Con-Progress (Sch)



od.		2	3	4	5	6	7	8	9	10	11		
1	Writing Workshop												
2	Jones-Temp 7												
3													
4													
5													
6													
7													
8													
9													
10													
11													
2													
3													
14													
5													
6													

REGISTRATION WORKSHEET

CVUHS 7-72

Name:____________________________ YOG____________

Counselor:________________________ Student #________

COURSES:

NOTE: Try to have the same number of courses in each quarter.

	Quarter____	Quarter ____	Quarter ____	Quarter ____	Quarter ____
Mods 1 &2					
Mods 3&4					
Mods 5&6					
Mods 7&8					
Mods 9&10					
Mods 11& 12					
Mods 13& 14					
Mods 15& 16					

Form B CVU/72

Champlain Valley Union High School

HINESBURG, VERMONT 05461

802-482-2101

JOHANNES I. OLSEN
Principal

LUCIEN E. LAMBERT
PAUL D. RICE
Assistants

July 18, 1972

Dear CVU Student and Parents:

Enclosed is your schedule for the 1972-73 school year.

This is the first year that students have had an opportunity to schedule themselves for courses -- that is, to select the quarters and modules that they would take their courses. We were extremely pleased that the process succeeded so well. There were fewer schedule conflicts than in any recent year!

Some confusion always occurs the first time a new process is used. But I am happy to report that even confusion was at a minimum. Just to be sure, each student's schedule has been reviewed by the guidance counselors before being mailed out now.

I would like to emphasize that we WANT YOU TO CALL if you have any questions concerning the enclosed schedule. If an error has been made, or if you want more information about a particular course, or if you would just like a better understanding of some part of the curriculum, calendar, or operation -- PLEASE CALL.

My best wishes for a pleasant summer.

Sincerely,

Johannes I. Olsen
Principal

JIO/ar

P. S. The first day of the 1972-73 school year is Tuesday, September 5th. All incoming 9th grade and other NEW students will report at 8:10 (until about noon) for an orientation session. All other students -- those returning to CVU -- will report at 1:00 (until about 3:00). Bus schedules will be mailed out in several weeks.

CVUHS 7/6/72

To: ________________________________

--This is to confirm your schedule for the 1972-73 school year. (The course number is the first three numbers shown.)

--A legend to explain the course numbers is attached.

--The dates for each quarter, vacations, holidays, etc., are indicated below.

--Any changes from the original course requests should have written parental approval on file at the school (attached to the original course request).

--If you have any questions or if any errors have been made, please call the school (482-2101) as soon as possible.

	Quarter ____	Quarter ____	Quarter ____	Quarter ____	Quarter ____
Mod. 1&2					
Mod. 3&4					
Mod. 5&6					
Mod. 7&8					
Mod. 9&10					
Mod. 11&12					
Mod. 13&14					
Mod. 15&16					

Mod. 1&2					
Mod. 3&4					
Mod. 5&6					
Mod. 7&8					
Mod. 9&10					
Mod. 11&12					
Mod. 13&14					
Mod. 15&16					

The dates of the eleven quarters are:

1: September 5 - November 8 **
2: November 9 - January 19 **
3: November 27 - February 2
4: January 3 - February 16
5: January 22 - March 23
6: February 5 - April 6 **
7: February 20 - April 20
8: March 26 - June 1
9: April 9 - June 15 **
10: April 30 - June 29
11: May 29 - August 10

Vacations, Holidays and Faculty In-service Days (no classes)

October 23
November 22 p.m., 23, 24
December 25 - January 2
February 19
February 20 - 23
April 20 p.m., 23-27
May 28
July 2-20

** denote traditional school year quarters

Independent study and DUO programs may occur within or between quarters.

Form B-1